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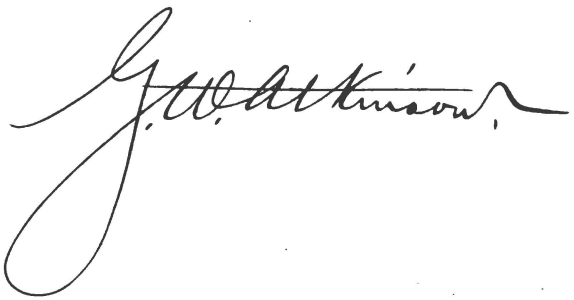

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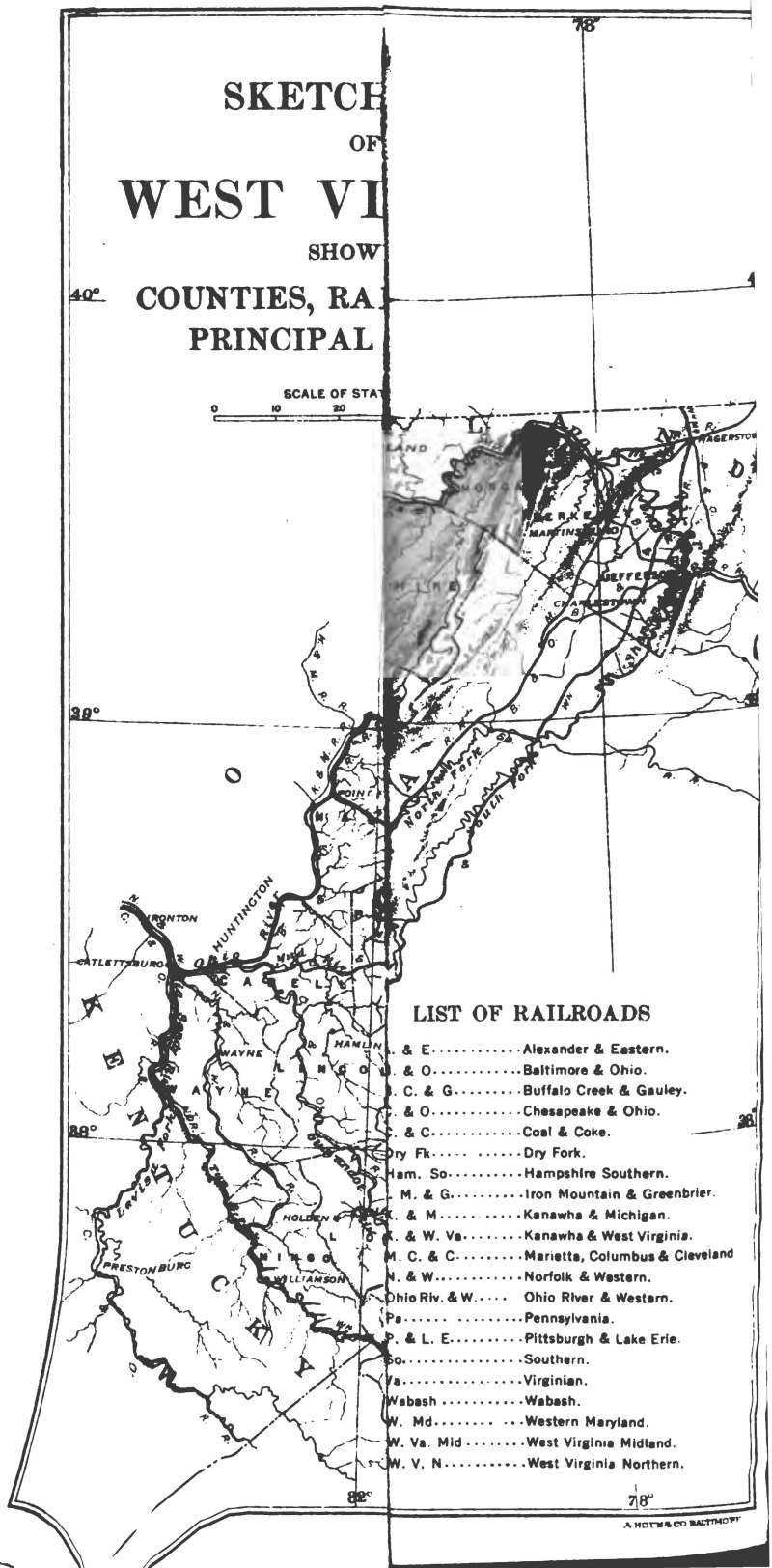

LIST OF RAILROADS

A. & E.	Alexander & Eastern.
B. & O.	Baltimore & Ohio.
B. C. & G.	Buffalo Creek & Gauley.
C. & O.	Chesapeake & Ohio.
C. & C.	Coal & Coke.
Dry Fk.	Dry Fork.
Ham. So.	Hampshire Southern.
I. M. & G.	Iron Mountain & Greenbrier.
K. & M.	Kanawha & Michigan.
K. & W. Va.	Kanawha & West Virginia.
M. C. & C.	Marietta, Columbus & Cleveland
N. & W.	Norfolk & Western.
Ohio Riv. & W.	Ohio River & Western.
Pa.	Pennsylvania.
P. & L. E.	Pittsburgh & Lake Erie.
So.	Southern.
Va.	Virginian.
Wabash	Wabash.
W. Md.	Western Maryland.
W. Va. Mid.	West Virginia Midland.
W. V. N.	West Virginia Northern.

SEMI-CENTENNIAL

History of West Virginia

By JAMES MORTON CALLAHAN
Professor of History and Political Science
West Virginia University

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With Special Articles on Development and Resources

Published by the
SEMI-CENTENNIAL COMMISSION
OF WEST VIRGINIA
1913

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Today we celebrate
The ripe achievements of our fifty years:—
The mastery
Of forest, field and mine, the mill which rears
Its bulk o'er many a stream, the forge and factory's
Incessant hum,
The railways linking mart to mart and home to home,
The growth of trade in each emporium,
And other wealth material that has come
To bless
Our subjugation of a wilderness,
And men undaunted in a time of stress:—
All these we proudly sum.

The pride is just: but let it not ignore
Our progress in the things that count for more
In strengthening a state
Than wealth material won.
Let it relate what we have done
To further Education, and promote
An understanding near of things remote.
What may we claim
Of those fine civic traits which earn the name
Of a great commonwealth,
And are the tokens of sound civic health?
Respect for law, to each his equal chance,
For variant opinion, tolerance;
Yet in the issues real
That touch the common weal
Conscience implacable, that alike defies
The bribe, the threat, or coward compromise.

And most of all,
As we survey the decades since our birth,
And count our present worth,
Let us recall
The hardy virtues that first cleared the ways
To these abundant days;
Nor, in the privilege
Of statehood which has brought us where we are,
Forget the pledge
Implied when first we set our eager star
Amid the galaxy
That crowns the ensign of a Nation free:

The pledge to keep the star forever pure
By probity of purpose and of deed;
In home and court and office to abjure
The sordid aim, the cloudy arts of greed;
Keep clean and straight
Our private ways; and dedicate
The best that in us lies to serve the State:—
So that the light symbolic of that star,
By us replenished still, shall constant be,
And carry far
The noblest radiance of Democracy.

From a poem by Herbert Putnam.

PREFACE

The Semi-Centennial Commission decided that the celebration of the fiftieth anniversary of the birth of the state should be given a practical form in some enterprise of permanent value. It seized the opportunity, furnished by the occasion, to collect data and publish a historical volume the value of which will be increasingly realized and appreciated in the later years of maturity of development resulting from the recent industrial awakening.

At the close of November 1912, in response to an invitation of the Governor and the Executive Committee of the Commission, I agreed to furnish for publication in connection with the Semi-Centennial celebration the manuscript of a condensed historical narrative which I had prepared largely from researches conducted, during several vacation periods, incidental to the assemblage of materials for class use at the West Virginia University and coincident with various attempts to stimulate the study of local history in the state. At the same time I agreed to take general editorial control of the preparation of a series of special articles, by different contributors, to combine with the unified narrative.

What at first seemed an innocent, and even an attractive, proposition, later assumed uglier proportions as I approached the duties of its concrete requirements. In addition to the duties incident to the editorial work I have spent much additional time and labor in the further elaboration and completion of the chapters of my historical narrative.

By much strenuous but quiet labor, the author obtained his materials from many sources—from old files of various newspapers, old manuscript record books and old letters, pamphlets and public documents, and reminiscences secured by interviews with the participants in public affairs. Arduous investigations, requiring much correspondence with many people in all parts of the state, and necessitating visits to many points in the state, have been conducted principally in the Department of Archives and History at Charleston, in the Library of Congress at Washington, D. C., in the Library of West Virginia University, in the Wheeling Public Library and in the Carnegie Library at Pittsburg.

Footnote references to authorities, which appeared in the first draft of the author's manuscript, have been omitted to meet limitations of space; but a carefully prepared bibliography is included in convenient form.

Although no pains have been spared to secure accuracy of statement, the author is conscious of the imperfections of the work and does not doubt that mistakes have escaped his detection. He has made no attempt to secure uniformity in the style of special articles prepared by others, each of whom is responsible for his own contribution.

Cordial thanks are due all who have given assistance in securing data. Among those who deserve special mention are Professor D. D. Johnson who rendered valuable service in the corrections of copy and galley proof, and my wife whose constant service entitles her to the "better half" of the credit of authorship.

In completing the labor involved in the preparation of the volume, I greatly appreciate the opportunity which it has afforded me to render service to the state and to extend my acquaintance among its people.

J. M. CALLAHAN.

West Virginia University,
Morgantown, W. Va., June 30, 1913.

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Introduction

Undaunted by danger, unconquered, true-hearted,
With ax-beaten march the brave pioneers came,
And the wild tangled vine of the wilderness parted
As Progress swept onward with banners of flame.

Lee O. Harris.

The story of the exploration, settlement and development of the trans-Appalachian region constitutes one of the most fascinating chapters of American history. The territory included in West Virginia, which received a few white settlers in its eastern panhandle as early as 1726-27 but was the home of few civilized men before the middle of the eighteenth century, has a history which in many ways illustrates the larger life of the nation with which it has an intimate connection at many points.

Its plain but self-reliant pioneers were the fore-runners of a mighty tide of immigration, far greater in energy than in numbers, which burst the barriers of the Alleghenies. They participated in the Anglo-French struggle for a continent—a struggle which began by collisions between the frontiersmen of rival nations along the upper Ohio. At the close of that struggle, from which they emerged with a new stimulus born of victory, they advanced from the ease and security of older settlements into the trans-Allegheny wilds, steadily pushed back the frontier and the Indians, and in the heart of the wilderness established their homes on many streams whose fate had recently hung in the balance. Here, they turned to the conquest and subjugation of the primeval forest which the Indians had sought to retain unconquered. Although a mere handful of riflemen, they served as the immovable rear guard of the Revolution, securely holding the mountain passes and beating back the rear assaults of savage bands which might otherwise have carried torch and tomahawk to the seaboard settlements. At the same time they served as the advance guard of western civilization hewing out paths across the mountain barrier and experimenting with the difficulties and opportunities of the wilderness.

The story of the settlement of every early community is full of the heroic deeds of these plain, modest, uncelebrated men of the struggling common people—men who sought no praise and achieved no great

fame, who were not conscious of their own greatness, but who were always ready for any service which was needed to maintain an advancing frontier. Out of many springs among the hills emerged at last the irresistable current of their strength. They toiled not in vain. While building homes in the wilderness, far from the tidewater East against which they were later forced to struggle for political and social rights, they were raising the framework of a self-governing state destined to play an important part in the history of the nation.

The new inducements to settlement, increasing after the battle of Point Pleasant in 1774, and receiving a new stimulus at the close of the Revolution, produced a rapid expansion movement which resulted by 1790 in a total trans-Allegheny population of over 50,000 people widely separated into many detached, isolated local groups, intensely individualistic in spirit, and with frontier conditions which, in the absence of transportation facilities to develop the vast resources of the region, were little fitted to develop unity of action or cooperation.

Gradually, with the extension of agricultural clearings made by steady and laborious work aided by axe and fire, there emerged the larger problems of improvements in communication, transportation, and industry, accompanied by an increase of refinement and culture and a growing sectional opposition against the political domination of tidewater Virginia. An era of larger industrial development, foreshadowed by the construction of several turnpikes from the East to the Ohio, was begun by the completion of the first railroad to the Ohio early in 1853 after a series of triumphs over the difficulties of the mountains.

Considering the different elements of population, different features of territory, and different interests, the formation of the new state by separation from the mother state (suggested even in the revolutionary period under conditions which gave birth to Kentucky), was the logical and inevitable result of the half century of sectional controversy between East and West in regard to inequalities under the constitution of 1776. These inequalities were only partially remedied by the constitutional conventions of 1829-30 and 1850-51—although the latter made large democratic departures from the earlier dominating influences of the tidewater aristocracy in the government, illustrated by the change from appointment to election of state and county officers. The secession of Virginia from the Union only furnished

the occasion and the opportunity to accomplish by legal fiction and revoluntionary process an act toward which nature and experience had already indicated and prepared the way.

The first steps toward separation of western Virginia from the mother state were taken by the irregular Wheeling convention of May 13, 1861 (composed of 425 delegates from 25 counties), ten days before the election in which the western counties decided against secession by vote of 40,000 to 4,000. A second irregular convention, which met June 11, nullified the Virginia ordinance of secession, vacated the offices of the state government at Richmond, formed the "Reorganized" government of Virginia, elected F. H. Pierpont to act as governor; and, two months later (August 20), made provisions for a popular vote on the formation of a new state, and for a third convention to frame a constitution. Members of the legislature elected from the western counties met at Wheeling on July 1, and, calling themselves the Virginia legislature, proceeded to fill the remainder of the state offices. After organizing the state government, they selected two United States senators who were promptly recognized at Washington as senators from Virginia.

The popular election of October 24 resulted in a vote of 18,489 to 781 in favor of the new state. A third convention, in which forty-one counties were represented, met at Wheeling on November 26; and, on February 18, 1862, it completed a constitution which was ratified early in April by a vote of 18,162 to 514.

The new state, erected by consent of the "Reorganized" government of Virginia (representing forty-eight western counties) and by the consent of Congress, revised its constitution (February, 1863) to meet the conditions of Congress requiring gradual abolition of slavery, and under the President's proclamation of April 20 was admitted to the Union on June 20, 1863.

In the crisis in which the state was born there were serious sectional differences. The strong sympathy for the Confederacy in the southern and eastern sections resulted in a sad state of disorder—illustrated in 1864 by the governor's report that in the extreme southern counties it was still impracticable to organize civil authority, and that in fourteen counties there were no sheriffs or other collectors of taxes "because of the danger incident thereto."

Even at the close of the war the new state was confronted by various conditions which seriously threatened its integrity and independence. In 1866, it rejected the overtures of Virginia for reunion

and secured the recognition of Congress in favor of its claim to Berkeley and Jefferson counties, which had been annexed in 1863 by legal forms and were finally awarded by decision of the United States supreme court in 1871.

The new state inherited from Virginia a boundary dispute with Maryland which was not settled until 1912, and it soon became involved with Virginia in a debt dispute which was partially decided by the supreme court of the United States in 1911 but still remains unsettled (in 1913).

Beginning its existence without a permanent capital, without any of the usual state institutions, excepting a lunatic asylum, and without proper executive agencies to secure the general welfare, the state promptly turned to solve the problems of its institutional and social needs, including the establishment of a system of public schools, normal schools and a state university. Executive agencies for inspection and regulation were developed rather slowly.

The first period of reconstruction closed with a victory of the Democrats in 1870, and the adoption of a new constitution in 1872. For over a quarter century the Democrats retained political control, although their majority steadily declined after 1880 and became a minority by 1896. Sectional divergences disappeared in the growing unity resulting from industrial integration and the expansion of improved communication.

The political revolution could not check the steadily growing economic revolution, which since 1872 has largely changed the industrial and social character of the state. The largest chapter in the history of the state is that relating to the great industrial awakening, which had its origin largely in the increasing demand for timber, coal, oil and gas, and was especially influenced by inducements for the construction of railroads and for the establishment of certain manufactures for which a portion of the state furnishes a clean, cheap fuel. Almost every county has felt the effects of the great transformation resulting from the extension of transportation facilities, the arrival of many immigrants from neighboring states and from foreign countries, and the opening of new industries which have precipitated a series of new problems not yet solved.

The great problems are no longer the appropriation and exploitation of natural resources such as confronted the solitary backwoodsman sinking his axe into the edge of a measureless forest. The earlier pioneer ideals, determined by experience under frontier conditions and followed by those who laid the foundations of the state—

ideals of conquest and personal development unrestricted by social and governmental restraint—have recently been modified greatly by the changed economic and social conditions of an era dominated by triumphant captains of industry who regard themselves simply as pioneers of a new era chopping new clearings for larger business, seizing new strategic positions for power sites or dam sites, and opening the way to new enterprises. They have broken down everywhere in the larger competitions and struggles terminating in cannibalistic absorptions, and in trust formations to fight new industrial battles. The new conditions, born of the struggles of a past whose life has almost vanished, have brought new problems which must be met and solved by new struggles—through methods of investigation, education and legislation. "It is only through labor and painful effort, by grim energy and resolute courage that we move on to better things."

The pioneer clearing is broadening into a field in which all that is worthy of human endeavor may find a fertile soil to grow; and the new democracy, through law and government, is beginning to exact from the constructive geniuses, who sprang from the loins of pioneer democracy, a supreme allegiance and devotion to the common weal. The people of the state, with increasing determination to preserve the heritage which remains, have begun to initiate proper legislation to restrict the evils of an era of unregulated exploitation, often under non-resident management, which has subordinated public welfare to private greed.

"The future holds great promise and also grave responsibility for the wise and conservative solution of far-reaching economic problems."

SEMI-CENTENNIAL

HISTORY OF WEST VIRGINIA

I. Geographic Conditions

A favored land,—
Secured against Atlantic's chilly blast
By Allegheny's steadfast mountain crest,
It slopes, through hill and dale and meadow vast,
To where a noble river on the west
Laves a low strand;

Its bosom deep
Garners rich store of Nature's wealth for man
Sufficient for a generation yet unborn,
And generations still beyond, until the span
Of centuries shall reach their utmost morn
And final sleep;

Its shaggy hills
Bear forests lavish to his further needs
For warmth, for light, for shelter and for rest,
And copious streams encourage its broad meads
To yield obedient crops, at the behest
Of him who tills.

From Poem by Herbert Putnam.

I. PHYSICAL BASIS.

West Virginia has an unusual topography which produces great diversity of climate and a copious rainfall. On its highest mountains the temperature may fall to 30 degrees below zero in winter, and in other parts of the state may rise to 96 above in summer. It is the meeting place of two well defined systems of winds blowing in opposite directions. Upon its Allegheny summits and slopes, clouds from opposite seas meet and mingle their rains. Those from the Atlantic break against the eastern side of the barrier and often produce terrific rains which usually do not reach the western slopes except in case of snow storms. Those from the southern or far western seas, carried by warm winds from the Gulf and Carribean or by cold winds from British Columbia, precipitate their loads of moisture throughout the remainder of the state. Local storms may come from any quarter. The amount of rain varies greatly in different years. The average yearly rainfall, including melted snow, is about four feet. It is always greater west of the Alleghenies and greatest near the summit.

The chief rivers of the state have their rise in Pendleton, Pocahontas and Randolph counties, which form the highest part of a plateau region covering about one-third of the state and forming a high arm which curves around toward the southwest. The New river (geologically the oldest river in the state), which has its source in North Carolina, after

Courtesy of W. Va. Geological Survey.

LITTLE BLACKWATER RIVER.

A View of Cheat River.

flowing in a northerly direction on the eastern side of the plateau, turns toward the west, cuts transversely through the table-land and mingles its waters with the Kanawha. It is especially designed by nature as a great source of water-power which after long ages of wasted energy may be harnessed and utilized in the new age to turn the wheels of exploitive industry at the command of the awakening life along its course. Practically every other river of the state also offers superior water-power vantages which have begun to attract both private capital seeking to seize and public interest seeking to regulate and control.

The entire area of the state was once the bed of an ancient sea into which ancient rivers from a surrounding region of land poured layers of mud, sand, and pebbles which by the pressure of ages and other agencies became sandstone. In the deeper parts of this sea, far from the shore, were many marine animals whose shells and skeletons were precipitated to the bottom and by long pressure were cemented into thick solid limestone. In shallow waters resembling swamps a rank growth of vegetation furnished an accumulation of fallen trunks and branches which in the course of ages beneath the water were transformed into vast beds of coal whose later value made them an important basis of industrial development.

After long ages, a large part of the bed of this sea with rocks unbroken was elevated above the water and formed the plateau from the highest part of which new-born rivers began to cut their channels toward the ocean. Later, at different periods, the mountains were formed by shrinkings of the earth's crust, causing stupendous foldings and archings of the rocks into a series of parallel ranges whose remnants often appear in isolated or detached series of individual knobs, after centuries of destructive erosion accomplished by the incessant toil of wind, frost, and rivers—which also prepared soils suitable for the needs of agriculture and its allied industries. In some cases these folds of earthcrust rose directly across the channel of the earlier bed of a river which, in spite of the steady upward movement, continued to cut its way across, forming a gap such as that cut by the Potomac at Harpers Ferry, by the South Branch at Hanging Rocks, by Mill Creek at Mechanicsburg, by Pattersons creek at Greenland, by North Fork at Hopewell, by Tygart's river at Laurel Hill in Randolph, and by Cheat at Briery mountain in Preston. In these instances, and in many others, the long and incessant struggle of the rivers has wrought a grandness and picturesqueness of wild scenery too little appreciated in the earlier struggle for possession and the later reckless race for riches.

The entire region was picturesque, and rich in vast and varied re-

sources which largely remained untouched for over a century after the Indian trails of the wild region of sombre shadows and healthy climate first attracted the advance guard of pioneer settlers. In spite of the general roughness of surface, the soil was valuable, adapted either to various purposes of agriculture or to stock raising and was capable of large returns under improved methods of cultivation. There were iron ores which formed the basis of earlier active industries, and an abundance of coal, oil and gas, fire-clays, sandstones and glass sands which formed the later basis for prosperous conditions felt by the entire region. There was also a wealth of woods which, after remaining largely undisturbed for over a century, has recently been almost depleted in most sections by a system of exploitation which has left in its desolate path nothing more important than the problems of conservation.

Before the westward invasion of white settlers, the ancient ridges between the Blue Ridge and the Allegheny plateau formed a great wilderness rampart which forced the medley population of tidewater Virginia into a useful unity and neighborly community life, under the ancestral tutorship of the wide sea, which proved of great value in the later struggle for independence from Europe and in the establishment of the nation. The explorer finding a gap was always confronted by other ridges of mountains, and following the channel cut by the Potomac he was soon confronted by a mazy wilderness and other obstacles to entrance into the mountain belt beyond. The education of mountain and forest came later.

By its physical formation the trans-Allegheny territory included in West Virginia was destined to be geographically distinct from the tidewater region of the Old Dominion. The flow of its rivers toward the Ohio largely determined its commercial connections after the abandonment of the earlier transportation by pack-horses. Even the eastward flow of the Potomac eventually determined its commercial relation with Baltimore instead of with points in eastern Virginia—a relation which through the influence of the Baltimore and Ohio railroad in the crisis which precipitated the formation of West Virginia determined the extension of its eastern panhandle to Harpers Ferry. Even the more direct route of communication between the Kanawha and the James rivers, presented obstacles which delayed the completion of an adequate avenue of transportation until after the separation of the new state was accomplished.

The second quarter of the eighteenth century marked the beginning of a longitudinal overflow movement southward and westward by advance up the Shenandoah from the western edge of the fertile lands of

Pennsylvania. Among these pioneers, following the earliest contingents of Germans, were the Scotch-Irish—Scotch in blood, Irish by adoption and Presbyterian in religion—who largely populated West Virginia and won their way into Kentucky and to the farthest West. The Appalachian barrier was finally crossed by the overflow from the East. By 1773 the tides of life began to flow toward Pittsburg which, by the strange geological changes resulting from the ice invasion of long ago (diverting the ancient river system which had its headwaters in West Virginia), was the natural gateway to the Ohio and the West at which centered various lines of migration from Virginia, Maryland and Pennsylvania. From the upper Shenandoah and the upper James there was a smaller expansion to the middle New river region.

2. OLD INDIAN TRAILS.

On the eve of its settlement by white men, the territory of western Virginia was the hunting ground of tribes of Delaware, Shawnee and Mingo Indians whose permanent settlements or villages were located in Pennsylvania near the confluence of the Monongahela and the Allegheny. Since 1713 they had occupied the region as tenants of the Iroquois of New York who claimed the ownership. From the Valley of Virginia to the Ohio river they used various trails which later served as the earliest paths of the pioneers.

One of the most eastern trails was the Virginia Warriors Path which became a traders and explorers route ascending the Shenandoah valley to the head of Clinch, thence passing through Cumberland Gap via the site of "Crab Orchard" and Danville, Kentucky, to the falls of the Ohio (Louisville).

Several trails connecting with the region drained by the Monongahela were distinctly marked. Westward from the Virginia and Maryland routes of travel which converged on the Potomac at Wills Creek was a transmontane trail which crossed upper Youghiogheny at "Little Crossings" (Great Meadows) and the main Youghiogheny at "Stewart's Crossing" (Connellsville) thence down the "Point" to the site of Pittsburg.

Another was the old Catawba war-path between New York and the Holston river leading also through the Carolinas (not an Indian thoroughfare after white settlements were made in Virginia). This path crossed the Cheat at the mouth of Grassy run near the Monongalia-Preston boundary line and farther south passed up the Tygart's valley. Another, the Warrior branch passed up Dunkard creek and via Fish creek to southern Ohio and Kentucky. Another, the Eastern trail

(Great War Path) from Ohio via Fish creek and Indian creek and White Day creek through Preston county (near the site of Masontown and Reedsville and crossing Cheat at Dunkard Bottom) to the South Branch of the Potomac—a route much used by the Ohio Indians in their attacks on the white settlements. A branch starting between Masontown and Reedsville passed southward between Independence and Newburg via York's run and south of Evansville to Ice's mill on Big Sandy creek where, it met the Northwest trail from Maryland via the bridge at Deakin's on Cheat. Another trail led from Maryland via Big Sandy near Bruceton (Preston county) and via Cheat to the vicinity of Morgantown.

Another important Indian route of travel was the Scioto-Monongahela trail which, after crossing from Lower Shawnee Town eastward to the Muskingum valley and from Big Rock (near Roxbury, Ohio) southeast via the watershed to the mouth of the Little Kanawha (Belpre, Ohio) and after a junction with another trail from the mouth of the Kanawha and the lower Scioto valley, finally crossed the Ohio and ran near the old "Neal's Station" (now Ewing's station on the Baltimore and Ohio railroad) north of the present Kanawha station and above Eaton's tunnel, thence via Dry Ridge to Doddridge county, passing though Martin's Woods, north of Greenwood to Centre Station, thence east of West Union tunnel (Gorham's), thence to the head of Middle Island creek, up Tom's Fork to the watershed in Harrison county, and down Ten Mile creek into the Monongahela valley. There was also a trail from the Ohio up the Kanawha and across the mountains to Randolph county.

Along the north side of the Kanawha passed the Sandusky-Richmond trail, an important branch of the Scioto trail which was the principal "war path" and trade path of the Shawanee country and the main route of the Sandusky-Virginia fur trade ascending the Sandusky valley from Lake Erie and descending the Scioto to the mouth at Lower Shawnee Town, thence passing southward as "Warriors Path" through Kentucky to Cumberland Gap and the Cherokee country. This branch trail reached the mouth of the Kanawha over the highland watershed between the Scioto and the Hockhocking rivers by a southeast route from a point on the Scioto above Chillicothe, at the intersection of the Scioto-Beaver trail and a trail to Fort Miami from which the Miami trail continued southward.

The trails leading from the Ohio east were well known to the early settlers who often posted scouts on them near the Ohio to report the approach of Indian war parties.

Indian trail and buffalo trace pointed the easiest way for fur trader and pioneer settler across mountain barrier into the unbroken wilderness drained by the Monongahela. The country gradually became known by reports of hunters and traders who crossed from very early times. Nemacolin's path, following in part an old buffalo trail across the mountains, furnished a pack horse route for traders who had already reached the Ohio before 1750. The blazing of this old Indian trail by Nemocolin and other Indians under direction of Cresap, acting for the Virginia gentlemen who had received 100,000 acres of land drained by the Ohio, precipitated a decisive war to settle the mastership of the western forests. This little westward path, marked by Indian's axe, became a path for Saxon commerce and consequently a path for Saxon conquest leading to the realization of the earliest dreams of the youthful Virginian who while traveling over it in 1752 was already planning a highway to bind the East and the West. It was later widened into a wagon road by Washington and Braddock and became an important highway to the lower Monongahela—although the first wagon load of merchandise over it did not reach the Monongahela until 1789.

Farther south, crossing a wilderness mountain region over which no roads were constructed for a century after the early era of settlement of the region drained by the upper Monongahela, were four other trails of no less importance for settlers of the region drained by the upper tributaries of the Monongahela. The McCullough traders' trail led from Moorefield via Patterson's creek and Greenland gap across a spur of the Alleghenies to the North Branch thence to the upper Youhiogheny (west of Oakland) thence (via Bruceton mills) to the Cheat near the Pennsylvania line. A branch of it led down Horse Shoe run to the mouth of Lead Mine run. The other three were more obscure. The North Branch trail, over which came the larger number of the early settlers on upper Cheat and many on the Buckhannon river and which probably was the route of the Indians who conducted raids in Hampshire county in 1754 to 1759, continued from Fairfax stone across Backbone mountain and down Lead Mine run and Horse Shoe run to Cheat river—connecting here with an up-river branch to the vicinity of Parsons and via the head of Leading creek to the Seneca trail at Elkins and to the settlements of the Tygart Valley, at the head of which it connected with trails to the Little Kanawha, the Elk and the Greenbrier. The trail to Greenbrier passed through Mingo Flats and west of the present Marlinton pike crossed the mountain—dividing at the top of Middle mountain into two branches, one of which continued to Old Field Fork and the other to Clover Lick. The Shawnee (or Sen-

eca) trail, although the chief highway between the South Branch and Tygart's valley, travelled westward yearly by pack horses laden with salt, iron and other merchandise and later by many droves of cattle driven to the eastern market, ascended the South Branch (passing the McCullough trail at Moorefield) followed the North Fork and Seneca creek, crossed the Alleghenies twenty miles south of the North Branch trail, and the branches of Cheat above the mouth of Horse Camp creek, and passed near Elkins and Beverly to the vicinity of Huttonsville in Randolph.

Another path, connecting with the old Shawnee trail from Pennsylvania and Maryland from the head of North Fork and following the general course of the later Staunton and Parkersburg turnpike, passed up the South Branch to the mouth of North Fork (in Grant county) which it followed to the mouth of Dry run (in Pendleton county), then followed Laurel creek to the site of the later crossing of the Staunton and Parkersburg pike, then turned westward, crossed the Alleghenies thirty miles south of the Seneca trail, followed the East Fork of the Greenbrier to the main river, crossed Shaver's mountain to the Shaver's Fork of Cheat, thence crossing Cheat mountain to Tygart's Valley, intersecting the Shawnee trail near Huttonsville and crossing to the head of the Little Kanawha which it followed to the Ohio. Two other trails may be noticed. One led from the headwaters of the South Branch via the Sinks of Gandy, to Shaver's Fork of Cheat river at the mouth of Fishing-Hawk, and across Cheat mountain via the heads of Files creek to Valley Bend (above Beverly). Another led from the Great Kanawha up the Elk and Valley Fork and down Elk Water to Tygart's Valley—a meeting place of many trails and probably a favorite hunting ground of the Indians.

An old well-known Indian trail, originally a buffalo trail and later used by settlers till 1786, passed from the Kanawha up Kelley's creek, thence down Bell creek and down Twenty Mile to its mouth (now Belva), up Gualey to a point over a mile north of Rich creek up which it meandered and thence passed over Gauley mountain through the site of Ansted and across the branches of Meadow creek to the upper waters of Muddy, an affluent of the Greenbrier. Over this serpentine trail the earliest settlers twisted their way. It was used for the outward trip of Lewis' army in 1774 and was followed by the Indian invaders who attacked Donnally's fort in 1778. The Gauley river route farther northeast also lead to the heads of the Greenbrier. The chief old trail of the Indians and early settlers from Lewisburg to the Ohio ran along the ridges at the heads of the tributaries of the Great Kanawha, cross-

ing Paint creek near its source. It was a mere passage way for foot travel through the wilderness—although over much of it one could ride horseback. It was used considerably for early travel.

The western Indian trail around the narrows of the Great Kanawha led from the Kanawha up Paint creek, thence via the site of Beckley, over the northeast extension of Flat Top mountain, and across the New river above the mouth of the Bluestone.

Among other trails was one via Horse Pen creek to the head of Clear Fork, down Tug, to the mouth of Four Pole, thence across the ridge between the Sandy and the Guyandotte. An early hunters' trail from the Greenbrier-New river section to Kentucky passed up East river via Bluefield, the Bluestone-Clinch divide, and the Clinch and Powell rivers.

II. Struggle for Possession, and Evolution of Settlements

I. THE FIRST ADVANCE.

Nearly two hundred years ago the cosmopolitan Lieutenant-Governor Alexander Spotswood of Virginia led an expedition which, by penetrating the fifty miles intervening between the frontier and the peaks of the Blue Ridge, and descending beyond the Valley of the Shenandoah, broke down the barrier which had checked the westward expansion of the English in America and began a conquest which made Virginia the mother of an empire.

Born in 1676, at Tangier in Morocco, of an illustrious Scottish family, and distinguished as a soldier who had fought with Marlborough at Blenheim, Spotswood became the first great expansionist and one of the first true republicans of the Old Dominion.

Coming to Virginia in 1710, he soon took an active interest in plans to break through the mountain blockade beyond which the traditional enemies of England and their Indian allies were already actively engaged in trade. He was confident that the colonists with proper encouragement would soon extend their settlements to the source of the James.

Riding at the head of a gay and merry body of thirty cavalier adventurers, marshalled and guided by the sound of the hunter's horn, and followed by a long retinue of negro slave's and Indian guides, spare horses, and sumpter-mules laden with provisions and casks of native Virginia wine, he left Williamsburg on June 20, 1716, traveled via King William and Middlesex counties and via Mountain Run to the Rappahannock, thence up the Rapidan to his own estates at Germanna, (colonized by Germans 1714) where all their horses were shod, thence to Peyton's Ford and via the present site of Stannardsville (in Green County) and over the rugged road through the Blue Ridge by Swift Run gap to the Shenandoah about ten miles below the site of Port Republic, and some writer has said that he continued westward through mountain defiles to a lofty peak of the Appalachian range (perhaps in Pocahontas county).

According to John Fontaine's journal of the expedition, each day's march was enlivened by the chase and each night's rest, after the meal of grouse and pheasants shot in forest glades, was enlivened by laughter, song and story which were stimulated by stores of various liquid mixtures from the vineyards of Virginia lowlands. Looking westward from a peak of the mountains, Spotswood was fascinated by the suggestion awakened by the view of a more distant mountain peak, to the west and north, from which Indian guides said one could see the sparkle of the fresh-water sea now called Lake Erie. On the Shenandoah, which Spotswood at first named the Euphrates, "with ceremonious salute, and appeal to the store of creature comforts" the adventurers took formal possession of the "Valley of Virginia" in the name of the Hanoverian monarch of England and buried the record in an empty bottle near the camp which they had pitched.

Returning to Williamsburg he gave a glowing description of the healthful region visited; and, perhaps in order to commemorate the recent jovial invasion of a wilderness, previously unbroken by the white man, he established the "Transmontane Order" of the "Knights of the Golden Horseshoe" and gave to each of the members of his expedition (and to others who would accept them with a purpose of crossing the mountains) miniature horseshoes bearing the inscription "Sic jurat transcendere montes." Howe in his Historical Collections of Virginia states that in commemoration of the event the king conferred the honor of knighthood upon Spotswood and presented to him a miniature golden horseshoe on which was inscribed the above motto.

From his excursion and hunting picnic among the hills he obtained visions which expanded his views as an expansionist and induced him to propose ambitious and aggressive imperial plans for control from the mountains to the Lakes—plans which although held in abeyance at the time and for many years after his removal from office in 1722, and after his death in 1740, were finally revived under a later expansionist governor, also a Scotchman (Dinwiddie)—and pressed to execution at a fearful cost.

Spotswood gave the stimulus which soon attracted to the passes of the mountains the pioneers who were later gradually awakened to the possibilities of a great movement which resulted in the winning of the West. The short journey from Germanna to the Shenandoah was the first march in the winning of the territory now included in West Virginia. The leader of the expedition continued to encourage western settlement by treaties protecting the frontier from Indians and by legislation for exemption of the inhabitants of newly formed counties from

quit rents. Some of his followers led in the westward movement along the Potomac and in the Northern Neck.

The earliest permanent settlers in the eastern panhandle, however entered from Pennsylvania by the "Old Pack-horse Ford" (at Shepherdstown). By 1727 Morgan Morgan settled on Mill creek (in Berkeley county) and Germans began a settlement which later grew into a village called New Mechlenberg (now Shepherdstown). In 1730 and within a few years thereafter, other daring pioneers settled upon the Opequon, Back creek, Tuscarora creek, Cacapon, and farther west on the South Branch. Among those who founded homes along the Potomac in what is now Jefferson and Berkeley counties were the Shepherds, Robert Harper (at Harper's Ferry), William Stroop, Thomas and William Forester, Van Swearinger, James Forman, Edward Lucas, Jacob Hite, Jacob Lemon, Richard and Edward Mercer, Jacob Van Meter, Robert Stockton, Robert Buckles, John and Samuel Taylor and John Wright. In 1736 an exploring party traced the Potomac to its source. In 1762 Thomas Shepherd secured an act of the assembly establishing Mecklenberg.

In 1732 Joist Hite and fifteen other families cut their way through the wilderness from York, Pennsylvania, and crossing the Potomac two miles above Harpers Ferry proceeded to the vicinity of Winchester and made settlements which exerted a great influence upon the early neighboring settlements in the territory now included in West Virginia. He also became involved in a famous land dispute of interest to settlers in the eastern panhandle—a dispute with Lord Fairfax who had inherited under a grant of 1691 a large estate south of the Potomac including the present counties of Mineral, Hampshire, Hardy, Morgan, Berkeley and Jefferson and one-eighth of Tucker and three-fourths of Grant. This lawsuit, which Fairfax began against Hite in 1736 and which was not settled until all the original parties were resting in their graves, a half century later, arrested development of the lower valley and stimulated settlement farther west. Several German immigrants, induced by insecurity of titles in the lower Shenandoah, crossed the Alleghenies and built cabins in the New, the Greenbrier and the Kanawha valleys.

Farther up the Shenandoah at "Bellefont," one mile from the site of Staunton, John Lewis in 1732 established a first location in Augusta county which at that time comprised all the undefined territory of Virginia west of the Blue Ridge mountains. The issue of patents in 1736 brought to Augusta and Rockbridge from the lower Shenandoah and from England a stream of Scotch-Irish Presbyterians, some of whom pushed their way with their descendants into the adjoining country know as Bath, Allegheny and Craig counties.

The descendants of these first settlers of the Shenandoah were among the pioneers who later crossed the Alleghenies and established homes in the valleys of the Monongahela, the Kanawha and the Ohio.

From the Shenandoah to the South Branch the advance was rapid—unobstructed by difficult mountains. Adventurers and homeseekers could either ascend the Potomac or take the shorter route across North Mountain. As early as 1725, John Van Meter, an Indian trader from the Hudson river, traversed the upper Potomac and South Branch valleys. In 1735 the first settlement in the valley of the South Branch was made in what is now Hampshire county by four families named Cobun, Howard, Walker and Rutledge. A year afterwards Isaac Van Meter, Peter Casey, the Pancakes, Foremans and others reared homes further up the South Branch—some of them located within what is now Hardy county.* By 1748 there were about 200 people along the entire course of the stream.

The expansion of settlements was influenced by conditions resulting from the great land grants owned by Lord Fairfax. In 1736 hearing glowing accounts of the South Branch (from John Howard who had gone via South Branch, crossed the Alleghenies and gone down the Ohio) Fairfax ordered a survey of his boundary and soon began to issue 99-year leases to tenants at the rate of $3.33 for each hundred acres, and to sell land outright on a basis of an annual quit rent of 33 cents. In 1747-48, after the erection of the Fairfax stone at the head of the Potomac in 1746, much of the land within the Fairfax grant in the South Branch country was surveyed by Washington and laid off in quantities to suit purchasers. Nearly 300 tracts were surveyed in the two years.†

At the same time, many frontiersmen—not approving the English practice but wanting full title in fee—pushed higher up the Shenandoah and South Branch valleys. New settlements crept up the South Branch into regions now included in Pendleton county, whose triple valleys had already been visited by hunters and prospectors—one of

*All these settlements were at that time in Orange county (formed from Spottsylvania in 1734 which extended to the "utmost limits of Virginia" including in its boundaries all of what is now West Virginia, Kentucky, Ohio, Indiana and Illinois.

† At the close of the Revolution the Fairfax lands were confiscated by Virginia and thrown open to settlement under the regulations for other state lands, and in time they became the property of many farmers. The project for large manors on South Branch and Patterson creek was never realized. In 1782 the Assembly confiscated the claims of the Fairfax heirs, having previously declared invalid the claims of the Vandalia and Indiana companies. In 1789 David Hunter received a patent for lands which had formally belonged to Fairfax, but being refused possession he brought suit in the court of Shenandoah county, which decided against him in a decision which was later reversed by the Supreme Court of the state. Later, David Martin, to whom Fairfax had bequeathed the right to the disputed property, appealed to the United States Supreme Court which in 1816 sustained the lower court of Shenandoah, causing many to fear that the confiscation of the Indiana and Vandalia claims might not prove a permanent settlement of their title to western lands.

whom had built a cabin about 1745 a half mile below the site of Brandywine. In 1746-47 Robert Green of Culpepper entered several tracts giving him a monopoly of nearly 30 square miles of the best soil. In 1747 he gave deeds of purchase to six families who were probably the first bona-fide settlers of Pendleton. In 1753 there was a sudden wave of new immigration and four years later the territory now included in Pendleton had a population of 200—equally divided between the South Branch and the South Fork, and most numerous toward the Upper Tract and Dyer settlement. The earlier settlers in the region now occupied by Hampshire and Hardy counties included Dutch and Germans and Irish and Scotch and English. The territory included in Pendleton was largely settled by Germans from the Shenandoah.

Considering the needs of the South Branch region, the Assembly in 1754 made provision for the formation of the new county of Hampshire from the territory of Frederick and Augusta with boundaries extending westward to the "utmost parts of Virginia." The county was organized in 1757. The presiding justice of the first county court was Thomas Bryan Martin, a nephew of Lord Fairfax. Romney was established by law in 1762 (by Fairfax).

In the meantime, to meet the exigencies of the expansion of western settlers, commissioners of Virginia, Pennsylvania and Maryland in 1744 negotiated with the Six Nations (at Lancaster, Pennsylvania) a treaty by which for 400 pounds they ceded to the English all the region between the Alleghenies and the Ohio. Settlements were delayed, however, first by the barrier of the Alleghenies, and later by the uninviting character of narrow defiles and dense wilderness, and of the uncleared valleys beyond, which furnished ample cover for treacherous Indians opposed to the adventurous pioneers seeking to penetrate the wild hunting grounds.

The first direct stimulus to settlement farther west came from the earlier settlements established about 1732 on grants including the site of Winchester and the site of Staunton. Following the expansion of settlements up the Shenandoah and the James, the most adventurous settlers, following the hunters, began to push their way across the divide to the New river and then farther west to lands now included in West Virginia. A century before the establishment of permanent settlements, the New river region of West Virginia westward to Kanawha Falls was visited by a party of Virginians under Captain Thomas Bates with a commission from the General Assembly "for the finding out the ebbing and flowing of ye South Sea." The earliest settlements in the New river region of West Virginia had their basis in the earlier settle-

ment of 1748 by the Ingles, Drapers and others at Draper's Meadows (later known as Smithfield, near Blacksburg, Virginia) and were possibly also influenced by the settlement of 1749 by Adam Harman near the mouth of Sinking creek (Eggleston's Spring, Giles county) and the neighboring settlement made by Philip Lybrook in 1750. They received their direct incentive from the report of Christopher Gist, who (in returning from his Ohio exploring expedition of 1750) passed down the Bluestone valley and crossed the New river a short distance below the mouth of Indian creek at Crump's Bottom (in Summers county). In 1753 Andrew Culbertson, induced by fear of the Indians to leave his home near Chambersburg, Pennsylvania, journeyed via the settlements in Montgomery and Giles county to Crump's Bottom. A year later Thomas Farley obtained the Culbertson tract and erected a fort at Warford farther west. Around the scattered settlements several others were begun in the same year. Pioneers from Pennsylvania came both by the James and by the South Branch and Greenbrier rivers.

The discovery of the Greenbrier in 1749, by a lunatic citizen of Frederick county, excited the enterprise of two men from New England (Jacob Marlin and Stephen Sewell) who took up residence upon the Greenbrier and were found there in 1751 by General Andrew Lewis, agent of the Greenbrier Land Company. This company obtained a grant of 100,000 acres of land, of which about 50,000 acres was surveyed by 1755—when operations stopped until about the close of the French and Indian war (after which they were renewed in spite of the King's proclamation).

The earliest incentive to actual occupation in the Monongahela and Ohio region was furnished in 1748 by the formation of the Ohio company which received from George II a grant of 500,000 acres along the Ohio between the Monongahela and the Kanawha and which planned settlements by which to divert the Indian trade from Pennsylvania. Plans for settlement by Germans from Pennsylvania were prevented by Virginia's law against dissenters.* Four years later, transmontane settlements were encouraged by the house of burgesses through an offer of tax exemption for ten years.

Many of the first settlers, west of the mountains considered the soils

*In 1751 the Ohio company desiring to obtain an additional grant for the region between the Great Kanawha and the Monongahela sent Christopher Gist to make explorations along the Ohio. After Gist made his report in 1752, the company petitioned the King for the grant and for permission to form a separate government in the region between the Alleghenies and the Ohio. After years of waiting and negotiation, the Ohio and Walpole companies were merged into the Grand Ohio company, which continued the efforts to secure the formation of the proposed province of Vandalia with its capital at the mouth of the Great Kanawha.

of the region non-supporting and intended to remain only until the game should be exhausted.

Daring frontiersmen began to seek trans-Allegheny homes farther north. The earliest attempts at settlement along the waters of the Monongahela were made by David Tygart and Robert Foyle on Tygart's Valley river (in Randolph) in 1753, by Thomas Eckarly and his brothers on Cheat at Dunkard's Bottom (in Preston) in 1754, and by Thomas Decker and others near the mouth of Deckers creek (in Monongalia) in 1758. Permanent settlements were not made until after the close of the French and Indian war, and until the treaty negotiated with Pontiac at the forks of the Muskingum by General Bouquet rendered peace on the border more certain.

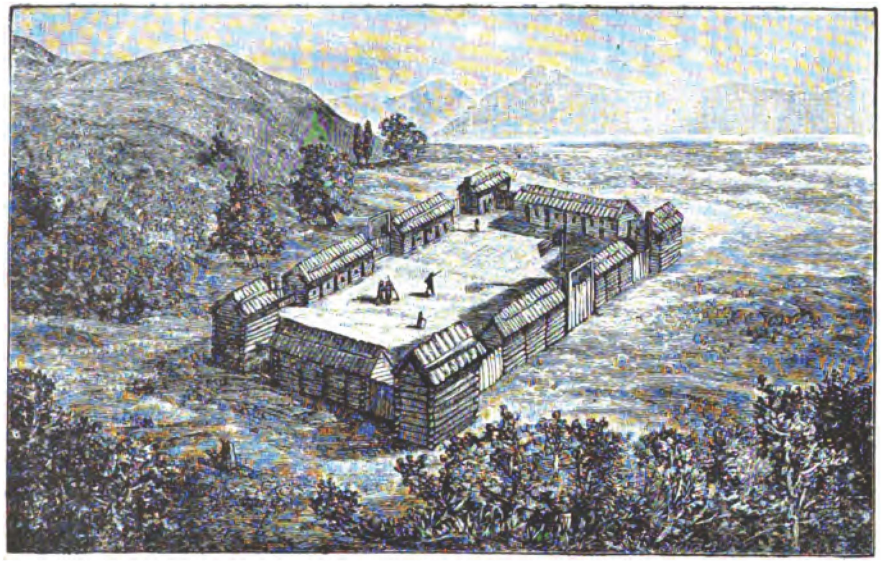
The center of the region which in 1754 (at the formation of Hampshire county) contained the pioneer settlers of West Virginia may be indicated by an irregular line drawn from the Blue Ridge through Harpers Ferry, Charleston, Martinsburg, Berkeley Springs, Romney, Moorefield, Petersburg, Upper Tract and Franklin, Marlinton, and thence down the Greenbrier and through Monroe county to Peters Mountain. The total population has been estimated at 10,000 whites and 400 blacks.

2. FIRST DECADE OF TRANS-ALLEGHENY ADVANCE.

During the early part of the French and Indian war western settlements were pushed back to Winchester and Cumberland, and the Indians held sway west of the Alleghenies.

Following Braddock's defeat the Indians were a great menace to the settlers along the entire frontier line. On the day before the defeat, the Shawnees completely destroyed the Ingles-Draper settlement and escaped with their prisoners, crossing the New above the mouth of Bluestone and from thence passing over the northeast extension of Flat Top and via the site of Beckley over the trail to the head of Paint creek and thence down the Kanawha. After the return of Mrs. Ingles measures were adopted by Governor Dinwiddie to defend the frontier. In 1756 an expedition under Captain Andrew Lewis passed down New river and through Drapers Meadows to the Sandy but as a result of the cold winter it was broken up near the junction of Tug fork. Its failure encouraged other Indian assaults and forays which continued until 1763.

Farther north forts for defensive and offensive operations were speedily erected along the frontier. Fort Ashby stood on the east bank of Petterson's creek, in what is now Franklin district, Mineral county;



SEYBERT'S FORT (1758), PENDLETON COUNTY.

Fort Waggener was on the South Branch of the Potomac, three miles above the site of Moorefield, in Hardy county; Fort Capon was at the forks of Capon, now in Bloomery district in Hampshire county; Fort Cox stood on the lower point of land at the confluence of the Little Cacapon and Potomac rivers; Fort Edwards was near the site of Capon Bridge, now in Bloomery district in Hampshire county; Fort Evans was two miles south of where Martinsburg now stands; Fort Ohio stood where the village of Ridgeley, Mineral county, is situated; Fort Pearsall was on the site of the present town of Romney; Fort Peterson was on the South Branch of the Potomac, in Milroy district in Grant county; Fort Pleasant was erected on the Indian Old Fields, now in Hardy county; Fort Riddle was in Lost River district, Hardy county; Fort Sellers was at the mouth of Patterson's creek, Mineral county; Fort Upper Tract was in what is now Mill Run District, Pendleton county; and Fort Seybert stood on the bank of the south fork of the South Branch of the Potomac in the same county.

The French with their savage allies bore down with resistless fury upon the West Virginia border, and around these primitive forts were enacted many tragedies and dramas of the wilderness. The Tygart and Foyle settlements on Tygart's Valley river together with those of the Eckarly's on the Cheat river, and of the Deckers on the Monongahela were destroyed, and many persons were killed on the Greenbrier river. Fierce battles were waged in the vicinity of Fort Edwards, Fort Riddle and Fort Pleasant; bloody massacres occurred at Fort Upper Tract and Fort Seybert. After the peace of 1763, Indian depredations resulting from Pontiac's conspiracy completely destroyed the Muddy creek settlement in the Greenbrier valley.

The fate of the Monongahela and all the trans-Allegheny region hung in the balance until the fall of Fort Duquesne opened the way for the new colonization movement—a movement also encouraged and aided by the Braddock and Forbes roads which had been opened to determine the destiny of the West.

In the decade between the French and Indian war and the opening of the Revolution, settlements could be made only in opposition to the policy of the English government. Although Governor Dinwiddie in 1754 in order to encourage volunteers to enter military service had set apart 100,000 acres along the Ohio to be granted to soldiers, George III, desiring that the trans-Allegheny region should remain a hunting ground for the Indians, or at least expecting to control the later settlement and government of the territory, on October 7, 1763 issued a proclamation forbidding the colonists to grant warrants, surveys or patents

in the territory until it could be opened by treaties with the Indians—thus theoretically extinguishing their titles to lands beyond the proclamation line. Two years later he directed the governors of Virginia and Pennsylvania to remove by force all settlers in that region—an order which was never executed in Virginia.

By the terms of the treaty of Fort Stanwix (now Rome, New York) in 1768 the Six United Nations ceded to the King of England practically all of West Virginia, except what is known as the "Indian Cession" a large territory north of the Little Kanawha (about 4,950 square miles) which they reserved and granted to Captain William Trent and other Indian traders in consideration of merchandise taken from them by the Indians on the Ohio in 1763. The General Assembly of Virginia repudiated the title of the traders who therefore never came into possession of any part of the cession. A plan to found a new province in the Ohio valley, first urged by Dinwiddie as early as 1756, assumed definite shape in 1771 when Thomas Walpole, Benjamin Franklin and others submitted to the King a petition for a grant of land including the larger part (forty counties) of the territory now included in West Virginia and the eastern part of Kentucky which they proposed to form into a colony under the name of Vandalia, the capital of which they proposed to locate at the mouth of the Great Kanawha (now Point Pleasant). The King favored this project to organize the sparsely settled Virginia hinterland into a fourteenth colony with a government more dependent upon the crown than those of the older thirteen, but in 1775 the execution of the draft of the royal grant was postponed to await the cessation of hostilities which finally closed only with the complete loss of English jurisdiction between the Atlantic and the Mississippi.

The people were determined to occupy the land without purchase of Indian titles, and during the peace on the frontier from 1764 to 1774 proceeded first to secure tomahawk rights and soon thereafter to establish settlement rights—pushing the frontier to the Ohio and into Kentucky. A tomahawk right, respected by the frontiersmen, was often merged into a settlement right. Although Virginia took no step until 1779 to sell lands in West Virginia, and no titles can be traced beyond that year, she respected the claims of the earlier settlers and in fact taxed these settlers on their lands before patents were issued. Pioneers, in order to hold their 400 acres on a settlement right, erected any kind of a pole cabin or log cabin near a good spring of water. They could preempt 100 acres additional if found free of prior claims. Surveys, both earlier and later, were inaccurate and unsystematic and laid foundation for many future law suits some of which are still on the court

dockets. In early years, speculators patented large tracts—10,000 to 500,000 acres—often overlapping scores of farms, but they could not hold land already occupied, and in many cases the large tracts were sold for taxes or otherwise transferred to the people in smaller tracts. These permanent settlements, tentatively beginning as early as 1764, became especially augmented both in extent and number from 1772 to 1774, numbering a total population of about 30,000 by 1775. They were seriously affected by the conditions which precipitated the battle of Point Pleasant in 1774, and by the renewed danger of Indian attacks beginning about 1777 and continuing in some sections until the treaty of 1795 following Wayne's victory against the Indians in northwestern Ohio. Was it any wonder that the Indians fought to retain a country which they and their fathers had used for a summer retreat for many generations—a land famous for game and fish and with abundance of fruits and nuts which could be obtained without toil?

Especially after the treaty of Fort Stanwix the enterprising yeomanry actively pushed forward over the mountains to the Greenbrier and New rivers, to the Monongahela, and down the Ohio as far as Grave's creek. Preparation for settlement further down the Ohio was begun by the survey of lands of George Washington at the mouths of the Kanawhas The first settlements made in the District of West Augusta before 1774 were grouped in a circular belt around a large wilderness of heavy forest land which remained largely unsettled for two decades later. The chief points of the circle were the Middle New and Greenbrier rivers, thence westward down the New and Big Kanawha to the Ohio, the Monongahela with its upper branches (Cheat, Tygart's Valley, Buckhannon and West Fork) and the region around Wheeling and Grave creek on the Ohio.

In 1760 James Moss reared his cabin at Sweet Springs, now in Monroe county. In 1769 the Woods family settled and built a fort on Rich creek about four miles east of the site of Peterstown which fourteen years later became the home of Christian Peters, an American soldier who served in Lafayette's corps at Yorktown. To the same region in 1770 came the Manns, Cooks, Millers, Alexanders, Nickells, Campbells, Dunsmores, Hokes, Lakes, Calloways, Sweeneys, Haynes, Erskines, Grahams, and Hutchinsons—largely from the Virginia valley. Adam and Jacob Mann (of English origin from Kent) and others built a fort on Indian creek about ten miles west of the present town of Union; the Cooks from the Valley of Virginia built a few miles from its mouth, the Keenys later built a fort on Keenys Knob farther down the river.

By 1769 settlers began to push up the Greenbrier and to form the

more western nuclei of settlements which later contributed to the advance down the Kanawha, to the Ohio and over the divide to the Monongahela. A settlement was made at a fort on Wolf creek (Monroe county) and another farther north (in Greenbrier county) at Fort Spring. In 1769 the first permanent settlement in Greenbrier county was made at Frankford by Colonel John Stuart, Robert McClenachan, Thomas Renick and William Hamilton followed by others from Augusta county. In the same year, Thomas Williams settled about two miles south of the site of Williamsburg, and near him William McCoy and William Hughart established homes. In 1770 on the site of Lewisburg was built the old Savanna fort which became Fort Union. Later settlements were made in 1771 at the foot of Hughart's mountain by John Patton and on Culbertson's creek by William Blake, in 1772 on Muddy creek by William McKinney, and in 1773 on Big Clear creek by William McClung (who patented a large tract on Meadow river) and on the site of Fort Donnally by Andrew Donally. In 1774 a settlement was made on the White Sulphur Springs lands. Farther up the stream by 1773 a settlement was established at Little Levels (now in Pocahontas) by John McNeil and others from the lower Valley of Virginia.

At the same time settlers began to venture down the Kanawha. In 1770 the land around the site of Montgomery was originally taken up by Levi Morris who later came by mule from Alexandria, Virginia and built the first house there. In 1773 the "big bottom" survey on which Charleston now stands, was located by Colonel Thomas Bullitt. In the same year Walter Kelly from North Carolina invaded the trackless forest which lay between Camp Union and the mouth of the Kanawha and made the first family settlement in the Kanawha valley (at the mouth of Kelly's creek). In 1774, on the site of Old Brownstown (now Marmet) on the Kanawha, Leonard Morris made a permanent settlement. Kelly's place became the point of embarkation for later home-seekers and travelers from the East and was often called the "Boat Yards."

Even earlier the pioneer settlers were penetrating into the wilds drained by the Monongahela. By 1772 nearly all the land in Tygart's valley was located—although few patents were obtained for it until ten or fifteen years later. Two forts were built (at Beverly and near Huttonsville) in 1774. In 1764 at the mouth of Turkey creek on Buckhannon river a forest camp was established by the Pringles and others who had deserted from garrison duty at Fort Pitt and after roaming through Maryland went west down Horseshoe to Cheat thence over the

divide to Tygart's valley. To this camp came prospective settlers who by 1769 brought their families to the Buckhannon valley and made several settlements which were followed by others at Booth's creek in 1770 and at Simpson's creek and Hacker's creek in 1772. In 1764 John Simpson, a trapper from the South Branch established his cabin opposite the mouth of Elk creek on the site of Clarksburg, around which settlers began to locate lands in 1772. In 1774 the sons of Captain James Parsons who had lived at Moorefield in the South Branch located at the Horseshoe bend on Cheat (now in Tucker county).

By 1766 pioneer settlers reached the middle Monongahela region now included in Monongalia county. In 1767 the first permanent settlement at Morgantown was made by Zachwell Morgan and others and from this point David Morgan emigrated up the river to lands now included in the bounds of Marion county, in which several settlements were made by 1772. About the same time settlements were made at various points in the territory now included in Preston county; in 1769 on the waters of Big Sandy near the sites of Clifton Mills and Bruceton, in 1770 on the Sandy creek Glades and east of Cheat (the Walls settlement) and in 1770-73 at Dunkard Bottom by hunters from the South Branch who led the way for permanent Virginia settlers.

The earliest known settlement of Wheeling was made in 1769 by Colonel Ebenezer Zane and two brothers, who leaving the South Branch near the present site of Moorefield, followed the trail frequented by Indians and traders from Cumberland to Redstone fort, the present site of Brownsville, Pennsylvania, and there, learning of a beautiful and fertile country bordering the waters of the Ohio, crossed the intervening country to the head-waters of the stream now known as Wheeling creek, and travelled along its banks to its confluence with the Ohio. Here they marked out a claim on the Island in three divisions, including nearly all of the present site of Wheeling, and built a rude cabin. In the following spring Colonel Zane brought his family from the South Branch via Redstone fort from which they floated down the Monongahela and the Ohio in canoes and pirogues. With him came Isaac Williams and domestic servants and laborers who had charge of the live stock. In 1770 other families from the South Branch joined the settlement, including Colonel David Sheppherd, John Wetzel and the McCullochs. Constantly recurring warfare with the Indians checked the growth of the settlement, which in 1782 consisted of a fort and a few log cabins surrounding it. Its early history was made up of almost continuous struggles against the efforts of the savages to destroy it.

These settlements augmented by new arrivals in 1774, constituted an

advance guard through which the Indians must penetrate to reach the interior in which new accessions were arriving from Maryland, Pennsylvania, and Virginia. By their position they also became a rendezvous for pioneer speculators who were engaged in entering lands on the borders of Kentucky and Ohio. In 1774 protection against hostile Indians was provided by the construction of Fort Fincastle which at the formation of Ohio county in 1776 was changed to Fort Henry in honor of the new governor of Virginia.

South of Wheeling, a settlement begun at Grave creek in 1770, received new accessions in 1772. Northward, in the territory included in Brooke county a few settlers arrived in 1772, followed by others in 1774.

While the Monongahela and Ohio settlements rapidly increased, the boundary between Virginia and Pennsylvania was still unsettled. Beyond the western line of Maryland, where Virginia's and Pennsylvania's possessions came in contact, a bitter dispute arose, almost leading to open hostilities between the people of the two states. Virginia wanted Pittsburg, and boldly and stubbornly set up a claim to the territory at least as far north as the fortieth degree of latitude. This would have given Virginia part of Fayette and Greene counties in Pennsylvania. The line of 39° originally claimed by Penn as the southern boundary of his grant would have given him a large part of the Monongahela region which is now included in West Virginia. In September 1767 the surveyors of the Mason and Dixon line, who had been accompanied by an escort of the Six Nations until they reached Petersburg, Pennsylvania, continued westward from that point alone beyond the western limit of Maryland marking the northern boundary of what is now Preston and Monongalia counties. They were threatened and finally stopped near Mt. Morris on Dunkard creek, at the crossing of the Warrior branch of the Great Catawba war path, by the Delawares and Shawnees who claimed to be tenants of the country. The survey was not finally completed until seventeen years later. In 1773 Governor Dunmore of Virginia sent Dr. John Connolly to Fort Pitt to resist occupation by Pennsylvania which had just established courts at Hanna's Town (Near Greensburg) with determination to exercise jurisdiction over the lower Monongahela valley. He soon occupied Fort Pitt, changed the name to Fort Dunmore, and established a rival court and rival magistrates precipitating the bitter struggle which was stopped only by the Revolution.

Lord Dunmore's war was the inevitable culmination of a long series of mutual grievances and outrages between the Indians of the Ohio

valley and the Scotch-Irish and German frontiersmen of western Virginia and Pennsylvania who, after the close of the French and Indian war and the smothering of Pontiac's conspiracy, and in spite of the policy of the English government, had relentlessly pushed westward with migratory instinct, converting aboriginal hunting grounds first into their own game forests and then into virgin farms. Although the native title to lands eastward from the Ohio to the mountains was quieted in 1768 by the treaty of Fort Stanwix, and reinforced in 1770 by the treaty of Lochaber with the southern Indians whose boundary was then fixed at the Kentucky river, many of the Indians denied the validity of the cessions.

Year by year the exasperation of the borderers, planted firmly among the Alleghenies, grew greater, and the tale of wrongs they had to avenge, grew longer. The savages grew continually more hostile, and in the fall of 1773 their attacks became so frequent that it was evident that a general outbreak was at hand. The Shawnees, located on the Scioto were the leaders in all these outrages; but the outlaw bands, such as the Mingoes and the Cherokees, were as bad, and were joined by parties of Wyandottes and Delawares, as well as various Miami and Wabash tribes.

The spring of 1774 opened with everything ripe for an explosion. Borderers were anxious for a war. Border warfare was precipitated by Captain Cresap's attack on Indians at the mouth of Captina creek and a general fight of Indians and whites at a rum dispensary opposite the mouth of Yellow creek—resulting in the death of almost all members of Chief Logan's family. Lord Dunmore, although he acted with discretion, was ambitious for glory and probably thought that a war against the Indians would prove a political measure to distract attention from the growing difficulties between the mother country and the colonies.

Early in the spring when the hostile Shawnees began their outrages, Lord Dunmore's lieutenant (Connolly) issued an open letter commanding the backwoodsmen to hold themselves in readiness to repel an attack by the Indians. All the borderers instantly prepared for war, and later when the Indians rose to avenge the murder of Logan's family in "Cresap's war," Dunmore himself prepared for the attack. Apprized by messengers from Cresap and Connally that the frontier settlers were alarmed at the situation, he promptly sent a defensive and punitive force of upper Potomac settlers under Major Angus McDonald who hastened to Wheeling, erected Fort Fincastle, and after descending the Ohio to the mouth of Captina creek invaded the Indian country and

destroyed their towns and cornfields. Soon thereafter Dunmore raised an army of two wings or divisions each 1500 strong, one to advance under Dunmore over a northern route via Fort Pitt and to descend the Ohio to the mouth of the Kanawha to meet the other, an army composed of backwoodsmen under General Andrew Lewis, which was instructed to rendezvous at Fort Union and march down the Kanawha. The backwoodsmen of the Alleghenies felt that the quarrel was their own and were eager to fight. They were not uniformed save that they all wore the garb of the frontier hunter; most of them were armed with good rifles and all were skillful woodsmen, and although they were utterly undisciplined they were magnificent individual fighters. On September 8, with 1100 men Lewis advanced from Camp Union on a fatiguing march, making his road as he went. Guided by Captain Mathew Arbuckle (an experienced frontiersman) he followed along the trail via Muddy creek, Keeny's Knob, Rich creek, Gauley, Twenty Mile, Bell creek and Kelley's creek to the Kanawha (September 21) which was followed to its mouth both by canoes and by trail). Reaching Point Pleasant (on October 6) he anxiously awaited Dunmore, whom he expected to join him, but who meantime had decided to march direct to the Scioto to a point not far from the Indian town of Chillicothe near the Pickaway plains. Finally (on October 9 he received through a messenger (Simon Girty) Dunmore's orders to cross the Ohio to meet him before the Indian towns near the Pickaway plains.

Although Lewis was not pleased at this change of plan he decided to break camp and march next morning. During the night, however, Chief Cornstalk—who, after an unsuccessful attempt to prevent the war, was now determined to bring it to a successful issue, and who, seeing his foes divided, had determined to strike first the division that would least expect the blow—ferried across the Ohio on improvised rafts a few miles above Lewis' camp his 1000 braves, picked warriors from between the Ohio and the Great Lakes. Before daylight the alarm was given in the camp and the drums beat to arms. General Lewis, thinking he had only a scouting party to meet, ordered out Colonel Charles Lewis and Colonel Fleming each with 150 men. Later, when the ringing sound of the rifles announced that the attack was serious, Colonel Field was at once dispatched to the front with 200 men just in time to sustain the line which, with the wounding of Lewis and Fleming, had given way except in a few places. He renewed the attack, which after his death was continued by Captain Evan Shelby. The fight was a succession of single combats. The hostile lines although over a mile in length were never more than twenty yards apart.

Throughout the action the whites opposite Cornstalk could hear him cheering his braves to be strong. Shortly after noon the Indians began to fall back and by one o'clock the action had ceased except the skirmishing which continued until sunset. Although the Indians had reached a position rendered strong by underbrush, many fallen logs and steep banks, under cover of the darkness they slipped away and made a skillful retreat. The whites, though the victors, had suffered more than their foes and had won the battle only because it was against the entire policy of Indian warfare to suffer a severe loss, even if a victory could be saved thereby.

Lewis, leaving his sick and wounded in the camp at the Point, and reinforced by the arrival of the Fincastle men under Colonel Christian who reached the ground at midnight after the battle, crossed the Ohio with a thousand men and pushed on to the Pickaway plains. When but a few miles from Lord Dunmore's encampment he heard that negotiations for a treaty of peace with the Indians were in progress. His backwoodsmen, however, flushed with their success and eager for more bloodshed were with difficulty restrained; but although grumbling against the earl for sending them back they were finally induced to march homeward after the treaty at Camp Charlotte.

Lord Dunmore's war, was a focal point in western history. In it fought the daring frontiersmen who had carried American institutions across the Appalachian barrier.

The battle of Point Pleasant was distinctly an American victory, fought solely by the backwoodsmen, and as purely a soldiers' battle in which there was no display of generalship except on Cornstalk's part. It was the most closely contested of any battle fought with the northwestern Indians and the only victory gained over a large body of them with a force but slightly superior in numbers. Although to call it "the first battle of the American Revolution" would be inaccurate, it was of the greatest advantage to the American cause in the struggle for independence: for it kept the northwestern Indians quiet for the first two years of the Revolutionary struggle. It was almost equivalent to the winning of the Northwest: for if it had not been possible to occupy that region during the early years of the Revolution, it is not improbable that the treaty of 1783 might have fixed the western boundary of the United States at the Alleghenies. It opened an ever-lengthening pathway to western settlement. "Thenceforward new vigor was infused into the two chief forces of the country—American expansion and American nationalism.

3. THE REAR GUARD OF THE REVOLUTION.

During the Revolution settlements and population continued to multiply west of Harpers Ferry along the Potomac and up the South Branch. Shepherdstown was a busy industrial town through which there was much travel and traffic, and for many years thereafter it continued to maintain its position as a center of trade. The new county of Berkeley, including all the territory now embraced in Berkeley, Jefferson and Morgan, was formed from Frederick county in 1772. The town of Bath was incorporated in 1776 and laid off into lots a year later. Martinsburg (named in honor of Colonel T. B. Martin) was established in 1777 by act of the Assembly which also appointed seven trustees in whom the titles to lots were vested. Middletown was established in 1787 and Drakesville in 1791. The increase of settlement in Hampshire county is indicated by the establishment of new towns: Watsontown in 1787 and Springfield (at Cross Roads) in 1790. In 1786 the new county of Hardy was formed with the county seat at Moorefield which had been established on the land of Conrad Moore in 1777.

In the Middle New river region settlement continued to expand during the revolution. The first important settlement on the Bluestone tributary of the New river was made by Mitchell Clay in 1775 at Clover Bottom (five miles north of Princeton). A settlement on the site of Alderson was made 1775-77 by Rev. John Alderson, a Baptist minister from Rockingham county. Here he organized a Baptist church in 1781. In 1778 Thomas Ingles and family located in Wright's valley near the site of Bluefield; but, finding himself too dangerously near the Indian trail from the head of Tug of Sandy southward across East river mountain to Wolf's creek and Walker's creek settlements, he soon removed to Burke's Garden. In 1780 the Davidson and Bailey families located at Beaver Pond Spring, a branch of the Bluestone—where they built a fort, battled with the Indians and maintained their position on the border until the close of the Indian wars in 1795. In the same year John Toney settled at the mouth of East river at Montreal (now Glenlyn). John and Christian Peters settled on the site of Peterstown in 1783—a year later than the settlement of Captain George Pearis at Pearisburg on land entered in 1780 by William Ingles. The influx of population was increased during the revolution by the arrival of emigrant tories from North Carolina (including David Hughes who settled on Sugar run in 1780) and at the close of the revolution by American and Hessian soldiers seeking new homes.

By the construction of Fort Randolph at Point Pleasant the New river and Greenbrier settlements were protected from larger bands of

Ohio Indians although they still suffered from smaller bands who evaded the frontier defences. The murder of Cornstalk at Point Pleasant in 1777 incited new Indian hostilities which lasted long after the Revolution bringing upon the pioneer settlers the horrors of savage vengeance and retarding the advance of the frontier lines of settlement. In 1778 Fort Randolph was attacked by a large force of Indians who, being compelled to withdraw, started toward the New river settlements which were saved only by timely warning. In 1783 Indians destroyed the settlement of Mitchell Clay, but they were pursued along the old trail from the Bluestone across Flat Top mountain and over the divide between the Guyandotte and Coal river along the top of Cherry Pond mountain and were overtaken near the mouth of Pond fork (in Boone county). In the fight that followed many fell before the fire of the pursuers and their backs furnished strips of skin used as souvenir razor-straps for years later.

The problems which tested the spirit and endurance of the frontiersmen of this period is illustrated by the story of Mrs. Margaret Hanley Paulee who, starting with her husband and son and others in Septembed 1779 from Monroe county to go to Kentucky,* was captured by a party of Shawnee Indians about five miles from the mouth of East river and taken to their town at Chillicothe and finally, after her ransom in 1782, returned home through the wilderness via Pittsburg with eight other ransomed captives.**

*In September 1779 John Pauley and family and others set out from the Greenbrier section to go to Kentucky via the hunters' trail. They crossed New river at Horse Ford near the mouth of Rich creek, then passed down New and up East river, which was the shortest route to Cumberland Gap. (There were no settlements then on East river.) This route via Bluefield, the Bluestone-Clinch divide to the Clinch, down Clinch and via Powell's river, was the route usually followed by people of the Greenbrier-New section to Kentucky.

**Other illustrations may be found in the period following the Revolution. Starting on the fall hunt with his sons on November 12, 1788, Captain Henry Harman, who, after a stay near Salem, North Carolina, had settled in New river valley in 1758 and later on Kimberling creek, met a party of Indians who fired on him on the right bank of Tug Fork of Sandy in the present McDowell county and after a bloody fight was compelled to return. In 1789 other raiding parties came up Dry Fork of Big Sandy and attacked the settlers. In the fall of that year a body of them came into the Bluestone and Clinch settlements, crossed East river mountain to the waters of Clear Fork of Wolf creek and after depredations returned via Flat Top mountain and North Fork of Tug Fork, carrying a Mrs. Wiley to the Indian town of Chillicothe where she remained until September 1782 when she escaped up Kanawha and New rivers. In 1790 another marauding party entered Bluestone and upper Clinch settlements and stole many horses.

In the spring of 1791, while Andrew Davidson had left his settlement at the head of East river (nearly one-half mile from the east limits of Bluefield to visit at Smithfield (Drapers Meadows) from whence his father had moved about ten years earlier, Indians captured his wife and children and took them to their town in Ohio where the children were shot. On the route (near Logan court house) Mrs. Davidson gave birth to a child which the Indians drowned the following day. She remained in captivity till after Wayne's victory at Fallen Timbers.

In 1792 while with a party of militia in pursuit of a band of Indians who had stolen horses in Bluestone and upper Clinch settlements, Samuel Lusk was captured in an attack on a creek flowing into the Guyandotte and taken to the Ohio town (Chillicothe.) While the Indians were on their fall hunt in the region of the lakes in September he escaped with Mrs. Wiley in a light canoe down the Scioto and up the southern bank of the Ohio to a point opposite Gallipolis where they found a few French settlers with whom they took refuge. They feared to follow up Big Sandy or the Guyandotte. Lusk decided to take no risks by attempt to

Awaiting the cessation of dangers from Indians the beginning of development along the Big Sandy was delayed for two decades after the surveys made by George Washington along the Tug. In February 1789 however the advance guard began to arrive from the East and attempted the first settlement at the junction of the Tug and the Sandy on the Vancouver tract forty miles from any other settlement. Here on an original survey made by Washington for John Fry about 1770 ten men under Charles Vancouver built a fort, raised some vegetables and deadened about eighteen acres, but the appropriation of their horses by the Indians prevented the completion of their plans to raise a crop. Soon thereafter a second settlement was attempted near the mouth of Pigeon creek. One of the earliest settlements in Mingo was made at the mouth of Gilbert on the Guyandotte after 1795 by French peasants under a man named Swann whose purpose was to start a vineyard there. This was followed by another on the Tug (at the mouth of Pond creek) by the Leslies. All the settlers of both these places were driven away by Indians. Provision for protection of later settlers along the waters of Big Sandy was made by the construction of blockhouses in 1790—after which the Indians ceased to give trouble in that region although they stole horses in the Scioto valley as late as 1802. The Leslies who returned in 1791 and located at John creek were the earliest permanent settlers in the Sandy valley. They were soon followed by many others including the Marcums on Mill creek (near Cassville).

In Greenbrier county which was created in 1777 new settlers arrived in 1778 and 1780 and continued to arrive thereafter. In 1793 the alarm created by prowling bands along the upper Kanawha and lower New was quieted by the organization of a company of men under Captain Hugh Caperton of the Greenbrier section to proceed to the Elk and to scout the country to the Ohio. After 1795 settlers from Greenbrier and the Kanawha began to occupy new lands in the region which in 1818 was formed into the new county of Nicholas (formed from Kanawha, Greenbrier and Randolph).

In Fayette near Montgomery a large tract of land was secured by

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return through Virginia mountains. He secured passage on a passing push-boat bound for Pittsburg. Thence he went to Philadelphia where he found Major Joseph Cloyd of Back creek with whom he returned home—about one month after his escape from Chillicothe. Mrs. Wiley declined to go via Philadelphia; and, a few days after his departure, started on her tiresome trip up the Kanawha and New to the home of her husband's people at Wiley's Falls in territory now included in Giles county.

Richard Bailey a revolutionary soldier who had moved from (now) Franklin county (then Bedford county) and settled in 1780 at Beaver Pond Spring, a branch of Bluestone, now in Mercer county, and built "Davidson-Bailey Fort," discovered in March that Indians had stolen his boy's calf (March, 1793.) Major Robert Crockett military commander of Wythe county then at the head of Clinch, gathered a party (including Lusk) and followed the Indians and overtook them at their camp on the island at the mouth of Island creek (opposite Logan) attacked the camp which rapidly dispersed (March 15) leaving their stolen horses behind them.

Henry Montgomery after his service in the Point Pleasant campaign and was used by him as a stock farm. In the vicinity of Ansted the earliest settlers were Baptist squatters who arrived about 1790. At Sewell, Peter Bowyer settled in 1798 and established a ferry.

The Bullett lands including the site of Charleston were purchased in 1788 by George Clendenin of Greenbrier who brought with him several daring pioneers. Fort Clendenin was built in 1788. Attack upon it by Indians in 1791 was the occasion of the famous historic ride of "Mad Anne Bailey" up New river to Fort Union to secure needed supplies. At Clendenin in 1789 the first court of the newly formed county was held. By act of 1794 Charleston became a town. Below Charleston on the Kanawha settlements were retarded. On December 12, 1791, Daniel Boone (then a resident of the Kanawha) writing briefly concerning conditions in the Valley said: "From the Pint (Point Pleasant) to Alke (Elk) 60 miles; No Inhabitence: from Alke to the Bote Yards (Mouth of Kelly's Creek), 20 Miles; all inhabited." In 1788 at the mouth of Coal river Lewis Tackett who came with the Clendenins erected a fort—the only one between Fort Donnally and Point Pleasant. In the same year his fort was destroyed by a band of Shawnees from the Scioto. Not until twelve years later did Stephen Teays come from Virginia and establish below Coalsmouth a ferry and an inn for travellers between the East and the Ohio valley.

After 1794 settlements along the Kanawha above Coalsmouth developed rapidly. From the region at the mouth, Mason county was formed in 1804. The new county was long retarded in development. Point Pleasant which was first settled in 1774 on lands surveyed by Washington four years earlier, did not grow for many years. Residents had a superstition that the cruel murder of Cornstalk in 1777 had caused a curse to rest upon the place.

Into the old District of West Augusta settlers came in large numbers after the Recolution. Both in the Monongahela country and along the upper Ohio stockade forts and block houses were built for protection, and roads which began to emerge frequently followed the tops of ridges in order to avoid Indian ambushes in the hollows. In October 1776, from the District of West Augusta was formed the counties of Youghiogheny, Monongalia and Ohio. Monongalia included all the territory drained by the Monongahela in Virginia and considerable territory in the southwest part of Pennsylvania. Its first county seat was on the plantation af Theophilus Phillips (two miles from the site of Geneva, Pennsylvania) which was located in the most thickly populated part of the county. During the Revolution the settlers manned

feeble stockade forts against Indian attacks at the same time their ranks furnished men to participate in the campaign and battles of the East.

At the close of the Revolution, the settlement of the boundary dispute with Pennsylvania reduced the bounds of Monongalia and necessitated the removal of the county seat. From 1774 to 1780 Virginia courts continued to sit on territory claimed by Virginia in western Pennsylvania. An agreement on the boundary was finally reached by negotiations of 1779 which were ratified by Virginia in June 1780. The temporary survey of the Mason and Dixon line was completed in 1781, and the permanent survey in 1784 (soon followed by the completion of the survey of the western boundary of Pennsylvania northward to Lake Erie in 1785-86). In April 1782, before the Pennsylvania-Virginia boundary line was run through Monongalia, and therefore prior to the regular administration of civil government in the disputed territory, confusion was threatened; and between the Youhiogheny and the Monongahela, and in the larger part of Washington county, there was (among the settlers opposed to the transfer to Pennsylvania) a strong sentiment expressed in convention favorable to a proposed new state including the territory west of the Alleghenies from the Kanawha to Lake Erie—a resurrection of the old Walpole grant of 1772 (the abortive *Vandalia)*. It was counteracted by an act of Pennsylvania passed December 1782, but was revived in 1794 by some of the leaders of the Whiskey Insurrection.

In 1782, the county seat of Monongalia was located at Morgantown by an act of the legislature which made Zackwell Morgan's house the place of holding court and designated Morgan's and Bush's Fort (now Buckhannon) as voting places. At Morgantown was built a frame court house which by 1802 was replaced by a brick structure. "Morgantown" was established as a town by the legislature in 1785. To stimulate the growth of the town the act of incorporation required every purchaser of a lot to erect upon it in four years a house at least eighteen feet square with a chimney of stone or brick. In 1788 an extension of three years was allowed on account of Indian hostilities, and in 1792 a further extension was granted because of difficulty of procuring building materials. The final Indian attack in this vicinity occurred on the site of Blacksville in 1791. Along the eastern border in spite of the Indian attacks on the settlement at Dunkard Bottom in 1778 and 1788 new clearings prepared the way for the later county of Preston. Near the Maryland boundary in 1784 Francis and William Deakins selected numerous choice tracts of land. By 1786 new pioneers located at Bran-

District of
West Augusta,
and original counties
formed therefrom,
1776.
BEAVER
ALLEGHENY
WESTMORELAND
WASHINGTON
YOUGHIOGANIA
FAYETTE
GREENE
OHIO
WEST AUGUSTA
MONONGALIA
District of
Pittsburgh
Fort Dunmore
Fort Pitt
Fort Henry
Wheeling
Fort Fairfax
Fort Pleasant
Fort Ohio
Fort Redstone
Fort Jackson
Fort Jackson
Fort Pitt
Fort Henry
Fort Pleasant
Fort Redstone
Fort Jackson
Fort Fairfax
Fort Pleasant
Fort Redstone

donville and in the vicinity of Aurora. In 1787 at Salem a German settlement was made. Settlements were increased in 1789 by arrivals from the South Branch and later by immigrants from Ireland and Pennsylvania. From 1785 the pioneer clearings slowly widened into farms. In 1784 Monongalia was divided by the legislature, and Harrison county was erected from that part south of a line drawn from Ford Fork on the Maryland boundary to the headwaters of Big Sandy, thence down the Big Sandy and Tygart's to the West Fork, thence up West Fork to Bingamon creek and up Bingamon to the Ohio county boundary. To the new county was refunded her proportion of the cost of erecting the public buildings in Monongalia. The county seat was located at Clarksburg which although a mere group of log cabins in 1781 was becoming a settled community and in 1785 it had several stores and was incorporated as a town. In 1788 it was visited by Bishop Francis Asbury who in his official capacity had journeyed horseback from North Carolina via Greenbrier county and Tygart's valley. In 1790 it had primitive roads connecting it with both East and West.

Midway between Morgantown and Clarksburg the basis for the later county of Marion was laid by the arrival of many families who settled in the vicinity of the site of Fairmont and at other points. At the head of West Fork the first settlement on the site of Weston was made by Henry Flesher who in 1784 after an attack by a party of Indians, discreetly took refuge for a time at the settlement made by Thomas Hughes and others on Hacker's creek. The earlier settlement on the Buckhannon was broken up in 1782 by Indians who also destroyed the fort. The first settlement in the present limits of Barbour was probably made in 1780 two miles northwest of Philippi—soon followed by other scattered settlements, for which there were many grants of land especially in 1786-88 and thereafter. As early as 1787 when the Randolph county court ordered the survey of a road from Beverly to Sandy creek, Daniel Booth probably lived near the site of Philippi, but the original owner of the land on which the town stands was William Anglin who probably settled there as early as 1783. The place was called Anglin's Ford in 1789 when the Randolph court ordered the survey of the road to connect it with Jonas Friend's (the site of Elkins). It was later called Booth's Ferry, named for Mr. Booth who about 1800 established or owned the old ferry which was not abandoned until after the completion of the wooden bridge at Philippi in 1852.

The region stretching along the head streams of Cheat and Tygart, forming the southwestern part of the Monongahela drainage system, received some of the earlest settlers who passed over the divide from the older-settled bordering region of Pocahontas. The scattered settle-

ments along Tygart's valley in which three new forts were built in 1777, were attacked by Indians late in 1777 and again in 1779, 1780, 1781 and 1782—after which this valley remained free from Indian invasions, with one exception in May 1791. The most disastrous invasion of 1781 began by an attack on a party of men who were returning from a visit to Clarksburg to obtain deeds from the land commissioners, and closed by an attack which almost broke up the settlement on Leading creek.

Randolph county was formed from Harrison county in 1787 by act of October 1786. At that time it included half of Barbour, half of Upshur, much of Webster and all of Tucker. At its first county court held in 1787 a county seat contest between the people of Leading creek and the people of the vicinity of the later town of Beverly was decided in favor of Beverly. In 1788 plans were adopted for a court house which was not completed until ten years later and was not used after 1803. In December 1790 Beverly was established as a town, by the Virginia assembly, on lands owned by James Westfall.

On upper Cheat a new settlement was begun on the site of St. George in 1776 by John Minear who after building a stockade moved his family and led a colony of others from the South Branch. Here he promptly built a saw mill which was probably the first one west of the mountains. Soon thereafter small colonies were established at various points along Cheat. They usually led their cows and brought a few utensils and other "plunder" on packhorses. On the revival of the Indian war in 1777 the Parsons colony built a fort and soon thereafter a grist mill and a saw mill. In April 1781 Minear and others went to Clarksburg to obtain their land patents from the commissioners of Monongalia and while returning, just before crossing the Valley river below Philippi, were attacked by Indians who then turned south and murdered the settlers on Leading creek. A year later one of three small forces of militia from Hampshire county sent by the governor of Virginia to protect the border settlements was stationed on Cheat near St. George. In 1787 and 1789 these Cheat settlements were again invaded by the Indians. Among the most prominent men of the county after Captain James Parsons and John Minear was the industrious James Goff who settled on Cheat near the Preston county line by 1786 and at one time owned the greater part of the land from the Minear claim to Rowlesburg. Others prominent were the Dumires who settled in the eastern part of the county above the upper tributaries of Horse Shoe run and the Losh family, one of whom at an early date built a grist mill on Horse Shoe run.

After the expedition of Lord Dunmore there was a revival of the

movement of settlers westward from the Monongahela toward the upper Ohio—a movement which continued at intervals throughout the Revolution. The chief outpost of defense was Fort Henry which was besieged by the Indians in 1777. In 1780, near the site of Triadelphia the settlers erected Fort Link which was attacked in 1781. Ohio county was formed in 1776. Its first courts were held at Black's cabin on Short creek near the site of West Liberty. In this region the large advance guard of pioneers of 1785-87 was followed by a cessation of land entries lasting until 1795 when entries were redoubled in number by a "new irruption." West Liberty was incorporated as a town in 1787. It was the county seat until Brooke county was formed in 1797. Wheeling which was laid out into town lots in 1793 and established at a town by legislative act in 1795, became the county seat in 1797.

To the settlements farther up the river came new home seekers in 1774-76, largely from New England. Several patents were located from 1785 to 1787 after which there was a cessation of entries until 1795 after which the advance guard was augmented rapidly. Charlestown (later Wellsburg) which was laid out in 1790 and established by act of legislature in 1791 became the county seat of the new county of Brooke at its formation in 1797. In the region now included in Hancock county the earliest settlement was made about 1776 by Mr. Holliday at Holliday's Cove. In 1783 and thereafter other settlements were begun by soldiers of the Revolution. In 1783 George Chapman located 1000 acres including the site of New Cumberland. After 1790 and especially after 1795 arrivals increased. In 1800 Hugh Pugh located 400 acres including the site of Fairview.

Below Wheeling creek settlements now included within the limits of Marshall county were made in 1777, 1785, 1790 and thereafter. In 1798 Elizabeth (now Moundsville) was laid out on Tomlinson's land facing the ferry across the Ohio which was established in the same year. In the territory later included in Wetzel county the first clearing was made by Edward Doolin who about 1780 patented and entered upon lands at the mouth of Fishing creek including the site of New Martinsville. After his death, resulting from an Indian attack upon his home in 1784, part of his land was bought by Presley Martin who was soon followed by Friend Cox. The settlement received few accessions for the next decade and grew very slowly thereafter. At the site of Sistersville a settlement was made by Charles Wells by 1802, and perhaps much earlier.*

*Wells, twice married, was the father of twenty-six children, sixteen of whom were still living—including three sisters for whom the town was named. After the formation of Tyler county (in 1814) the first county court was held at Wells' house. The place was then called Ziggleton but was rescued from this name soon thereafter. On petition the county seat was removed to McKay's which was called Next Post Office, and soon thereafter it was removed to Middlebourne.

The region of western Virginia about the mouth of the Little Kanawha secured few settlers before 1785 but its unbroken solitudes became more and more tempting in the decade which followed. In 1783 several tomahawk or preemption claims to rich bottom lands on the Virginia side of the Ohio were made by Robert Thornton, Samuel and Joseph Tomlinson (and their sister Rebecca) three Brisco brothers, and others. The lands on the site of Parkersburg which were claimed by Robert Thompson on the basis of a tomahawk entry made ten years earlier, were confirmed to him by the land commissioner. In the same year they were assigned to Alexander Parker (of Green county, Pennsylvania) who in 1784 received a patent from Governor Beverly Randolph of Virginia. At the death of Parker in 1800 these lands descended to his daughter whose title was disputed by John Stokely and others.

One of the first permanent settlers at the mouth of the Little Kanawha was Captain James Neal of Green county, Pennsylvania, who first arrived in 1783 as deputy surveyor of Samuel Hanway of Monongalia to survey the entry of Mr. Parkers on the site of Parkersburg. He brought others with him by flatboat in 1785 and on the south side of the river erected Neal's station, the first block house in the vicinity which served as a place of protection for both settlers and travelers. Two years later he brought his family. Later he became a justice of the peace with authority to perform the rites of marriage. Although security was increased by the erection of Fort Harman on the site of Marietta in 1786 and Farmer's Castle at Belpre in 1789 the Station was threatened in 1790 by Indian bands who continued to invade the Little Kanawha region.

At the site of Williamstown on which the Tomlinson brothers (Samuel and Joseph) made a tomahawk entry in 1770, the first permanent settlement was made by Isaac Williams* in March 1787, following the establishment of Fort Harman in 1786 directly across the Ohio at the mouth of the Muskingum. It was made on a wilderness farm of 400 acres of land, preempted and partially improved in 1783 by the Tomlinson brothers for their sister Mrs. Rebecca Martin whom Williams married in 1775 at Grave creek (where she had been housekeeper for her brothers since the death of her first husband in 1771.) The new settlement soon became a noted and interesting place and here

*Isaac Williams was born at Chester, Pennsylvania in 1737. At the age of 18 he served in the Braddock campaign as a ranger and spy under the employ of Virginia. In 1758-67 he hunted on the Missouri river. In 1768 he conducted his parents from Winchester and settled them on Buffalo creek (now in Brooke county) near West Liberty. In 1789 he accompanied the Zanes in explorations around Wheeling, Zanesville and elsewhere. In 1774 he accompanied Governor Dunmore in the expedition against the Shawnees and was present at the treaty negotiations near Chillicothe. He died September 25, 1820.

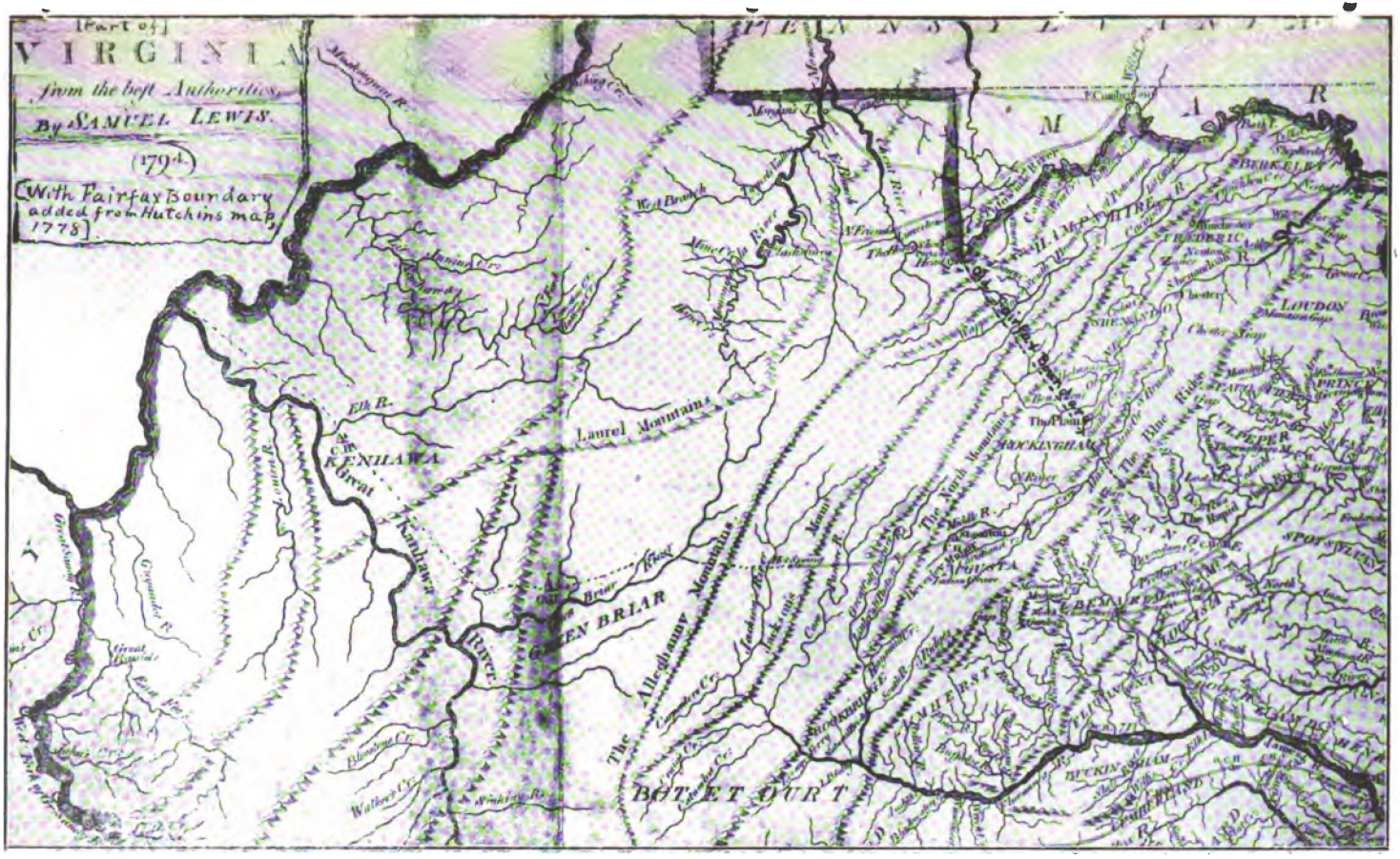
Williams remained until his death thirty years later. By 1789 it was connected with Clarksburg and the East by a trail cleared by Captain Nicholas Carpenter and sons who drove cattle over it to Marietta and were killed on it by the Indians in 1791.

The interior regions now included in Ritchie county (formed from Harrison, Lewis and Wood in 1843) were first opened to the notice of settlers in 1789 by the construction of a state road from Clarksburg to Marietta which for nearly forty years was an important thoroughfare to the Ohio. It was still an almost unbroken wilderness for another decade. The first cabin home in its limits was built as early as 1800 by John Bunnell on the site of Pennsboro. In 1795, Mrs. Maley of Philadelphia exchanged her dowry for 1000 acres near the site of Harrisville; but, although she promptly started with her husband on the long journey, she turned aside to the upper Shenandoah from which she moved to Ritchie in 1803.

In 1782 part of the bottom lands below the mouth of the Little Kanawha, first located in 1771 by George Washington, were included in the survey of a tract located by William Tilton and Company, a mercantile firm of Philadelphia which in 1785 employed Joseph Wood of Pittsburg to act as agent for the colonization and sale of the lands. A large tract at the site of Belleville was selected as a place to begin settlement. In the fall of 1785 Wood freighted a boat with cattle and utensils to begin the new settlement and left Pittsburg November 28 with Tilton and four Scotch families—landing at the site of Belleville on December 16, 1785. Here they completed the erection of a blockhouse early in January 1786. Mr. Wood then laid out the new town of Belleville, donating a lot to each actual settler. One hundred acres were cleared the first year. When Tilton returned to Philadelphia in the spring of 1786, Wood was left in charge as sole agent of the company and manager of the settlement. He continued to make improvements and provide good defenses. New families arrived in 1787, and a company of hunters came from Lee creek where they had erected "Flinn's Station." In 1790 Wood married one of the earlier emigrants, the marriage being performed at Belpre because no one in Belleville had authority to officiate at the wedding. A year later he moved to Marietta where he later filled many important offices. In 1796 Belleville received a new stimulus by the addition of Connecticut emigrants led by George D. Avery who for several years thereafter conducted a merchandise business there in connection with the shipbuilding.

4. EXPANSION OF SETTLEMENT AFTER WAYNE'S VICTORY.

A glimpse of the rush of pioneer immigrants to the Ohio following the treaty of Greenville after Wayne's victory of 1795, the experiences incident thereto and the conditions along the route between Maryland and Wheeling and southward along the Ohio, is obtained from a letter written at Belleville (near the earlier Flinn's Station) in November 1796 by Samuel Allen. Mr. Allen describes a journey from Alexandria via Cumberland to the Ohio via "broadaggs (Braddocks) old road" undertaken by himself and several other New Englanders under the management of Mr. Avery who had lots to sell at Belleville. He states that the fare from New London to Alexandria was $6.00 for each passenger and that freight for goods was 60 cents per hundred pounds. At Alexandria, wagoners were hired to carry the goods across the mountains to Morgantown on the Monongahela at a cost of "thirty-two shillings and six pence for each hundred weight of women and goods." On June 30 the company left Alexandria. The men walked the entire 300 miles and for three days Mr. Allen carried a very sick child which without proper medical assistance died (July 14) on the mountain in Allegheny county, Maryland, and was tenderly laid to rest in a grave beside those of several strangers who had died crossing the mountain. Leaving Braddock's road near the Pennsylvania line, the company reached Morgantown on July 18. They found the river too low for boats; but, four days later, favored by rains which rapidly raised the river, part of the company embarked before the arrival of all their wagons—leaving orders with a local merchant to send their goods. As soon as the rise in the river would permit, on July 23 Mr. Allen and two others started by land with the cattle and horses via Wheeling creek and on August 9 arrived at Belleville. Along the entire route from Morgantown to Wheeling they found the country settled, and a pleasant road, and saw "beautiful plantations," and "large fields of corn and grane;" but over the large part of the route from Wheeling to Belleville, except along the banks of the river, they passsed through a wilderness which was broken only by a blind footpath and in which they found it "very difficult to get victules to eat." Along the river they found some inhabitants who had arrived in the spring and had no provisions except what they had brought with them. At Belleville, the new settlers found the "country as good as represented and settling very fast." They found life on the Ohio interesting and were not tempted to return to New England. They had caught the spirit of the West, and had faith in the future of their own


[Part of]
VIRGINIA
from the best Authorities
By SAMUEL LEWIS.
(1791.)
[With Fairfax Boundary added from Hutchins map, 1778]
Monongahela R.
Elk R.
KENHAWA
Kanawha
River
Laurel Mountains
GREEN BRIAR
The Alleghany Mountains
BOTETOURT
Greenbrier R.
Great Kanawha
Blue Stone Cr.
Walker's Cr.
West Fork of Ohio
West Branch
Monongahela River
Tygart's River
Buckhannon R.
Jackson's River
Cowpasture R.
Maury R.
Mount Jackson
Shenandoah River
Mount Vernon
Alexandria
Dumfries
Occoquan
Potomac River
Rappahannock River
Rappahannock R.
Rappahannock Cr.
Hazel River
Hedgman River
Rivanna River
Rivanna R.
Mechunk Cr.
Tuckahoe Cr.
Tuckahoe R.
Appomattox R.
Appomattox River
Buffalo Cr.
Buffalo R.
Dan River
Dan R.
Roanoke R.
Roanoke River
Staunton R.
Staunton River
Meherrin R.
Nottoway R.
Nottoway River
Blackwater R.
Blackwater Cr.
Chickahominy R.
Chickahominy Cr.
Pamunkey R.
Mattapony R.
Mattapony River
Rappahannock River
Potomac River
Shenandoah River
Cacapon R.
Cacapon Cr.
Sherrandoe R.
Sherrandoe Cr.
Hawksbill Cr.
Hawksbill Mt.
Blue Ridge
The Blue Ridge
The North Mountains
Mount Jackson

village from which they could see many boats which passed on the river laden with families hunting new homes.

The following extracts from Mr. Allen's letter to his father furnish a live picture of local conditions:

"There is now at this place a number of familys that came since we did from Sesquehanah. There is now at this place eighty inhabitance. Corn is going at 2s per bushel by the quantity 2s 6d by the single bushel. There has been between two and three thousand bushels raised at Bellville this season & all the settlements along the river has raised corn in proportion but the vast number of people that are maving into this country & depending upon bying makes it scare & much higher than it would be.

"There is three double the people that passes by here then there is by your house there is packets that passes from Pittsburg to Kentucky one from Pittsburg to Wheeling one from that to Muskingdom 90 miles one from that to Gallipolees 90 miles the french settlement opisite the big Canawa & from that there is another to Kentucky—of which goes & returns every week &—loaded with passengers & they carry the male Mammy offered me some cloath for a Jacket & if you would send it by Mr. Woodward it would be very exceptible for cloths is very high here Common flanel is 6s per yard & tow cloth is 3s 9d the woolves are so thick that sheep cannot be kept without a shephard they often catch our calves. I have often be awoak out of my sleep by the howling of the wolves. * * * * * * * * * * * * * Horses are very high in this country & if you have not sold mine I shall be (glad) if you would try to send him on by Mr. Woodward. * Land is rising very fast. Mr. Avory is selling his lots at 36 dollars apeace he has sole three since we came here at that price we were so long a comeing & provisions so very high that I haid not any money left when I got here except what I paid for the cattle I bought I have worked for Mr. Avory since I came here to the amount of sixteen dollars I paid him 80 dollars before we left London. I am not in debt to him at present or to any one else I have sot me up a small house and have lived in it upwards of a fortnight we can sell all our milk at 2d per quart Mr. Avory will give me three shillings per day for work all winter and find (furnish) me with victules or 4s and find miself I need not want for business I think I am worth more than I was when I came."

In 1796 Eric Bollman, who journeyed from Cumberland west over the Alleghenies, spent the first night at West Port (Maryland) and on the afternoon of the second day passed through the Glades to which many hundred head of cattle were driven yearly from South Branch for pasturage, and after the second night "breakfasted with the large and attractive family of Tim Friend the noble hunter and dined at Dunkards Bottom on Cheat, spent the third night with Mr. Zinn and arrived at Morgantown on the following day."He regarded this as the nearest point at which to reach the western waters. From the latter point he travelled via the mouth of George's creek (near Geneva), through Uniontown, Brownsville and Washington to Pittsburg.

In October 1798 Felix Renick with others, starting from the South Branch of the Potomac to visit Marietta, on the third night reached Clarksburg" which was then near the verge of the western settlements

except along the Ohio. West of Clarksburg he spent the night in the woods but early next morning unexpectedly found a "new improvement" established by a lone man who had settled in the wilderness to accommodate travelers at high prices. After two more nights in the woods he reached his destination.

Settlements along the Little Kanawha were greatly increased by the tide of new immigration following the treaty of Greenville of 1795. As danger decreased many new families arrived; the Cooks and Spencers from Connecticut, and the Beesons from Pennsylvania who settled on the river near the site of Parkersburg; the Hannamans, Creels, Pribbles and Kicheloes on the Kanawha; the Beauchamps on the site of Elizabeth and the Hendersons farther above; the Neals, Phelpses, Foleys, Wolfes and others (including Blannerhassett) below the Kanawha. In 1797, Harman Blannerhassett came via Pittsburg to Marietta and in 1798 located on the upper half of the island where he could hold his colored servants as property and at the same time be near intelligent and educated officers of the American army who had settled at Belpre. The island, first entered by Washington in 1770, and later surveyed in 1784 under a patent issued by Governor Patrick Henry, had been owned since 1792 by one Backus. Blannerhassett lived in the old block house until he completed his mansion in 1800.

By 1798 there were enough settlers to justify steps to secure a new county by separation from Harrison, and in the following year Wood was formed with interior boundaries beginning at a point on the Kanawha thirty miles from the Ohio northeast and extending thence northeast to the Ohio county line at a point twenty-one miles from the Ohio. Much contention arose concerning the location of a county seat which the court was authorized by the Assembly to select "at or near the center of the county as situation or convenience would permit." The principal claimants or contestants, for the court house were the Spencers at Vienna and Isaac Williams at the Ferry. Justices of the county court, who met in 1799 at Hugh Phelps' residence, fixed the location at Neal's Station. Those who met at Isaac Williams' in October 1800 ordered the erection of public buildings on lands of Williams, but a month later by a vote of 10 to 6 adjourned to Hugh Phelps' house at which they unanimously agreed to erect the court house and whipping post above the mouth of Little Kanawha at its junction with the Ohio on lands of John Stokely. The village at that time was called "The Point" or Stokelyville, consisting of a half dozen log cabins. Here Stokely (whose patent was dated December 8, 1800) laid out a town which until 1809 was called Newport. On

an adjoining part of the Parker estate which was saved to the Parker heirs (700 acres) the new town of Parkersburg was laid out.

In 1810 an act was passed establishing Parkersburg adjoining and including Newport and allowing the seat of justice to be removed to a proposed brick house. The survey of the town was made by George D. Avery a surveyor and lawyer of Belleville. In 1812 or 1813 a contract was made for a new two story court house to be built of brick, forty feet square. Trouble resulted at once. Vienna, and Munroe or Neals on the South side, continued to assert their claims. Some objected to the extravagance and others to the location. The Vienna people prepared a petition to the legislature which proceeded to appoint commissioners (from Ohio and Mason counties) to decide the contest. The decision was in favor of the public square in Parkersburg, and there the court house and also the old whipping post were erected in 1815.

Above Wood county in the present territory of Pleasants settlements were made by 1797. In the territory now included in Tyler, the earliest centers of settlement were at Sistersville, which was laid out in 1814 as the county seat, and at Middlebourne which was established as a town in 1813 and has been the county seat since 1816. Sistersville at which a ferry was established in 1818 was later known as a good boat landing.

Farther up the Little Kanawha in the region of Wirt county the first settlement was made in 1796 on the site of Elizabeth by William Beauchamp who was soon followed by others and in 1803 built a grist mill. The earlier name of Beauchamp's Mills was changed to Elizabeth in 1817 in honor of David Beauchamp's wife whose maiden name was Elizabeth Woodyard.

Eastward and southward in Calhoun (formed from Gilmer in 1856) in Gilmer (formed from parts of Lewis and Kanawha in 1845) in Braxton (formed from Lewis, Kanawha and Nicholas in 1836) in Clay (formed from Braxton and Nicholas in 1858) and in Webster (formed from Nicholas, Braxton, and Randolph in 1860) development of settlements was delayed and retarded by location. On a Virginia map of 1807 no towns are shown between upper Tygart and the mouth of Elk. In the territory of Roane (formed from parts of Kanawha, Jackson and Gilmer in 1856) the first settlers, Samuel Tanner and family, reached Spring Creek valley and located in 1812 at the site of Spencer on lands included in a survey of 6000 acres patented by Albert Gallatin in 1787 and later owned by J. P. R. Buerau who located at Gallipolis with other French Colonists in 1791. This settlement was called Tanner's Cross Roads from 1816 to 1839 after which it bore

the name of New California until 1858 when it was incorporated under the name of Spencer.

Along the Ohio below Wood county, in the territory now included in Jackson county (formed from Mason, Kanawha and Wood in 1831), the first actual settlers were William and Benjamin Hannaman who arrived in 1796. With them came James McDade, who became an Indian scout along the Ohio between the two Kanawhas. Others settled in 1800. In 1808 John Nesselroad settled at the mouth of Sand creek. Among those who came with him was Lawrence Lane who reared his cabin on the site of Ravenswood—on lands which William Crawford surveyed for George Washington in 1770 and which were settled by squatters who were later ejected by the agents of Washington's heirs. Ravensworth (accidentally changed to Ravenswood by the map engraver) was laid out in 1836 three years after Ripley became the county seat.

About 16 miles above Point Pleasant on 6000 acres of the Washington lands a settlement designed as a Presbyterian colony was begun in 1798 by Reverend William Graham who for twenty-one years had been president of the first academy west of the Blue Ridge. The attempt failed at the death of its leading spirit who died at Richmond a year later, resulting in the withdrawal of the discouraged colonists. The place is still known as Graham's Station.

Along the lower Kanawha, in the territory which later (1848) formed Putnam county, settlement was delayed until after 1799—although sites for homes had been selected over 20 years before and George Washington and his surveyors had visited it in 1770. A settlement at Red House was made in 1806 but none was made at Winfield until about 1815.

South of the Great Kanawha, "the whole country swarmed with surveyors and speculators" after the news of Wayne's victory and the treaty of 1795. Even before the certainty of safety from Indians along the old war paths, the wide wilderness domain between the few scattered settlements invited the enterprise of land speculators of the East who procured from the Virginia land office at a nominal price land warrants for large entries and tracts of lands which were later located in the unbroken forest under a policy whose methods, resulting in uncertainty of land titles, long continued to hinder and retard settlements. Nearly all the territory south of the Kanawha and the Ohio to the headwaters of Holston, were entered, surveyed and carried into grant. Robert Morris surveyed grants for about 8,000,000 acres of land, much of which was patented to him as assignee of Wilson Carey Nicholas in 1795. The territory comprised within the pres-

ent counties of Mercer, Raleigh, Fayette, McDowell, Wyoming, Boone, Logan, Mingo, Wayne Cabell, Lincoln, Kanawha and Putnam was almost completely "shingled over" with these large grants by the Virginia land office and frequently they over-lapped. Commencing on the East River mountain on the south side, and then again on the north side, were grants to Robert Pollard, one for 50,000 and the other for 75,000 acres; then came the grant of 80,000 acres to Samuel M. Hopkins, a grant of 50,000 acres to Robert Young, 40,000 acres to McLaughlin, 170,000 acres to Moore and Beckley, 35,000 acres to Robert McCullock, 108,000 acres to Rutter and Etting, 90,000 acres to Welch, 150,000 acres to DeWitt Clinton, 50,000 acres to Dr. John Dillon, 480,000 to Robert Morris, 500,000 acres to the same, 150,000 acres to Robert Pollard, 500,000 acres to Wilson Carey Nicholas, 300,000 acres to the same, 320,000 acres to Robert Morris, 57,000 acres to Thomas Wilson, 40, 000 acres to George Pickett, and farther down Sandy, Guyandotte and Coal rivers were large grants to Elijah Wood, Smith and others.

Peace having been restored along the frontier settlements, and no further danger being apprehended from the Indians, there was also a great rush to the most desirable parts of the New river valley and westward by people from eastern Virginia and western North Carolina. The region along Middle New river settled rapidly; and civilization advanced by the construction of houses, the opening of roads, and the election of civil officers. The people, complaining of the inconvenience of travel to the county seat at Lewisburg, in 1799 secured from the Assembly an act creating Monroe county. The first county court selected the site of Union for the county seat. The county belonged to a judicial district which also included Greenbrier, Botetourt, Montgomery, and Kanawha. Part of Monroe was combined with parts of Montgomery and Tazewell in 1806.

Coincident with the increase of immigration, a "vast throng of people from the New river valley quickly penetrated the country between the New river settlements and the Ohio and settled on the Sandy, Guyandotte and Coal waters, even reaching to the Ohio." Among them were the McComases, Chapmans, Lucases, Smiths, Coopers, Napiers, Hunters, Adkinses, Accords, Allens, Fryes, Dingesses, Lusks, Shannons, Baileys, Jarrells, Egglestons, Fergusons, Marcums, Hatfields, Bromfields, Haldeons, Lamberts, Pauleys, Lawsons, Workmans, Prices, Cookes, Clays, Godbeys, Huffs, McDonalds, Whites, Farleys, Keezees, Perdues, Ballards, Barretts, Toneys, Conleys, Stollings, Stratons, Buchanans, Deskins, and many others who largely people the section and left honored descendants throughout it.

On the territory later (1847) included in Boone, the first settlement was made in 1798 on Big Coal river near the mouth of White Oak creek, by Isaac Barker. At that time the nearest neighboring settlement was that of Leonard Morris at Marmet, and the nearest grist mill was at the mouth of Gauley. In the decade which followed clearings were made and homes built in the Coal river valley by many hardy pioneers from Monroe, Greenbrier, Cabell and Kanawha counties and from Virginia and Pennsylvania.

One of the earliest pioneers of the interior region south of the Kanawha was Edward McDonald (great grandfather of Judge Joseph M. Sanders), who entered and surveyed the valuable land on Clear Fork of Guyandotte (in Wyoming county) which David Hughes, the tory, had pointed out to him for a blanket and a rifle. In 1802, in company with his son-in-law Captain James Shannon, he removed to Guyandotte and took possession of the land. Captain Shannon who settled a few miles above the Big Fork of the Guyandotte found Indian wigwams still standing in the bottoms. In 1812 James Ellison (born at Warford 1778), a distinguished frontier Baptist preacher, planted the Guyandotte Baptist Church on the site of Oceana.

In Lincoln the first settlers were four men named McComas, who arrived from beyond the mountains in 1799 and after raising a crop of corn in the fall returned for their families. Near them other cabins soon appeared. Farther away on Ranger's branch (a tributary of Ten Mile creek) Isaac Hatfield settled in 1800 and was soon followed by others. Among the early settlers along Trace fork was John Tackett who arrived with his family in 1801. On the site of the county seat, David Stephenson erected a cabin in 1802. Near the mouth of Slash creek on Mud river (12 miles southeast of Hamlin) Luke Adkins settled in 1807 and near him several others reared their cabins. In 1811 Richard Parsons led the way through the wilderness to the mouth of Cobb's run upon which others soon built neighboring cabins.

On the upper streams and tributaries of the Big Sandy valley a considerable population from North Carolina, Virginia and Maryland settled before the settlements were made near the mouth. Near the forks of Big Sandy, Samuel Short reared his cabin (near Cassville) about 1796, followed by others in 1798 and subsequent years. Near the mouth, Stephen Kelley settled in 1789 followed by a neighbor in 1799, and others in 1800. On the upper waters of Twelve Pole the first settler arrived in 1799. On the same stream at the mouth of Lick creek, James Bias settled in 1802 and was followed by others in 1802 and 1803. Near the site of Trout's Hill, Jesse Spurlock and

Samuel Fergerson built cabin homes in 1802 and were followed by others in 1802 and 1806.

The present territory of Cabell was settled at a comparatively late date. The earliest settlements in the territory were located on the Savage grant, made in 1775 to John Savage and fifty-nine other soldiers of the French and Indian war on lands surveyed by William Crawford about 1771 and extending from above the Guyandotte and up the river for a short distance, down the Ohio to the Big Sandy, and up the Big Sandy on both sides. The earlier grant included 28,627 acres. In a later lawsuit it was stated that in 1775 some of the grantees partitioned the lands among themselves and after taking possession set up a claim of exclusive ownership to the allotments which they held, but according to established tradition there were no settlers on the grant before 1796. Parts of the grant were occupied by squatters after that date. The first permanent settlement was made in 1796 at Green Bottom by Thomas Hannon of Botetourt county. Guyandotte was settled soon thereafter by Thomas Buffington and others. It became the county seat in 1809 and was made a town by legislative act in 1810—three years ahead of Barboursville. At Salt Rock on the Guyandotte, Elisha McComas settled about 1800. Between Guyandotte and Barboursville, at the Shelton place, Edmund McGinnis settled with his family in 1802. Midway between Barboursville and Guyandotte a settlement was also made by Jacob Hite (grandson of Joist Hite) who came to the Savage grant in 1808.

III. Chief Features of Early Industrial and Social Expansion

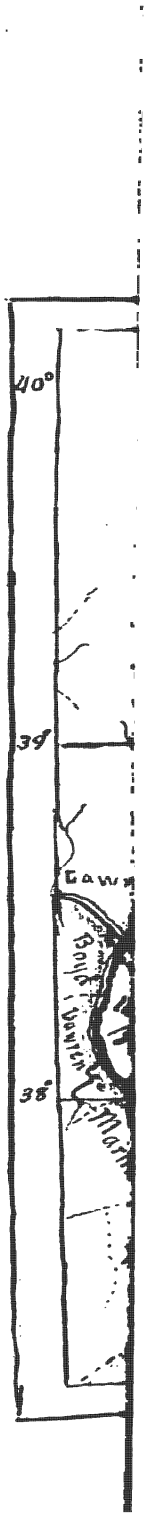
I. GENERAL SURVEY.

The early wooden farm implement, gradually gave way to iron imturned to the conquest of primeval wilds which the Indians had sought to retain unconquered. With no appreciation of the wealth of the depths of the primeval forests they gradually extended the area of cleared bottom lands by the steady and laborious work accomplished by axe and fire. The finest timber was burned or used for fence rails. Gradually, with the introduction of a few rude saw mills, a small portion of it found a more appropriate use in the few plank houses which began to replace the more primitive log cabins.

The problems of sheltering cabin and rude agricultural clearings were soon followed by larger problems of better communication through the almost fathomless depths of almost trackless regions, and problems of improvements in transportation. The settlers, at first following mere trails along the streams or across the bends of the streams or the divides, later began to open wider avenues of travel to meet the needs of thickening settlements and multiplying population which dictated the formation of new counties and the incorporation of new towns. In everything they were bound together by a community interest—fasting, feasting, fighting, praying and cursing with one common mind. Although always influenced by traditions and customs and laws of Anglo-Saxon civilization, they often became in their isolated communities a law unto themselves.* Banded together by neighborly ties and cooperation, and isolated from the touch of orderly law and the refinements of culture, they forged a set of customs which were transmitted like law and formed the basis of an unwritten law.

In the earlier periods of settlement it was customary every autumn

*As late as 1822, after the passage of the act of 1819 to regulate marriages and to prevent forcible and stolen marriages, there were complaints that the inhabitants in some localities labored under great inconvenience from lack of persons duly authorized to officiate in performing the rites of matrimony. To remedy this condition in Cabell, Kanawha and Monongalia, the Assembly authorized the county courts to appoint persons who could legally officiate after they took the oath of allegiance.


40°
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for each little neighborhood of a few families to send a caravan of pack horses heavily laden with peltries, ginseng and bears' grease, to the older settlements east of the mountains to barter for salt, iron, utensils and implements. The difficult journey by bridle paths required several days. Two men often managed a caravan of ten to fifteen horses, each carrying about two hundred pounds burden. At night they encamped and sank to sleep on pack-saddle pillows, often amidst the sound of howling wolves and screaming panthers. For many parts of northwestern Virginia the place of exchange, first by pack horse and later by pack horse and wagons, was in succession, Baltimore, Frederick, Hagerstown, Oldtown and Fort Cumberland.

The treaty with Spain in 1795 and the later opening of steam navigation, however, stimulated the activity of commerce on the Ohio and encouraged many to plant on a larger scale and participate in a larger and more convenient commerce. Small farms on the Monongahela and upper Ohio early became the source of supply to the New Orleans markets for flour, potatoes, apples and pork.

Cattle raising also became an important industry along the Ohio from whence the animals were driven to the Glades for a brief period of pasture, and then to the Baltimore and Philadelphia markets. Wool growing also became important and smelting furnaces were erected in the Monongahela valley and the northern panhandle. Later the war of 1812 emphasized the need of internal improvements. The commercial restrictions of the period were a factor in causing trade and immigration across the Alleghenies by an overland route. In 1815 wheat and cotton were carried in wagons from Wheeling to the East, and after the opening of the Cumberland road to Wheeling in 1818 there was a larger traffic across the mountains from the neighboring region. Finally, through the fertility of the soil, the industry of the settlers and the eastern demand for their surplus products, the problems of the primitive life of frugal economy and mere subsistence were merged into the new problems of improved industry and better houses and new conditions and standards of life. The surplus product of energy and labor, through the law of supply and demand, found a sale in the older communities of the East—furnishing a money commodity of exchange, the means to increase wants and to improve homes and farms, and the stimulus to facilitate communication between east and west. With these improvements came the accumulation of wealth and the increase of refinement and culture.

New influences appeared with the arrival of a new class of settlers, such as those who formed the German settlement in Preston near Mt. Carmel and the New Englanders who made their largest settlement at

French Creek in Upshur county and in Lewis. Several colonies of Germans also found homes along the Little Kanawha, in the upper panhandle, and in Doddridge and Randolph counties.

The early wooden farm implement gradually gave way to iron implements which were later improved or supplanted. The old hominy block with wooden pestle was succeeded by the handmill of stone, which later gave way to the water-propelled tub-mill which first utilized the water power along the rapid streams around the sources of the South Branch, the Cheat, the Monongahela, the Elk, the Gauley, the New and the Tug. The early sickle and flail gradually gave way to the reaping cradle and thresher, by a natural process of evolution. About 1840 the first rude "chaff-piler" threshing machine made its appearance. In 1850 the Downs' "Separator" thresher was introduced, followed soon thereafter by its rival—Ralston's "patent threshing and cleaning machine." Delanoe's "patent independent" horse rakes, and Ketcham's mowers, first introduced in the vicinity of Wheeling in 1854 by R. H. Hubbard (the first dealer in agricultural implements in the western part of the state) were not generally used until about 1865.

The first county fair in the territory of West Virginia was held at Mecklenburg (now Shepherdstown) by authority granted by the Virginia house of burgesses in 1766. The first concentrated action for the encouragement of improvement of agriculture, attempted in 1841 by the creation of a board of agriculture by an act which was repealed the following year, was accomplished through the Marshall county Agriculture Association which was incorporated in 1850, and, by similar associations organized in Monongalia, Jefferson and Cabell counties. The Northwestern Virginia Agriculture Society, which purchased and equipped the Wheeling fairgrounds was incorporated in 1858.

Between 1830 and 1850, western Virginia increased rapidly in population and in wealth. This was due in part to the construction of turnpikes which attracted emigrants and aroused the interest of speculators in the cheap lands and the rich natural resources. So intense was the land craze at times that associations were formed to prevent land buyers from overbidding each other and to treat those who offended to rail-rides and to tar and feathers. At the same time, many factories were established by capitalists from New England and the Middle states who brought emigrants with them.

The material advance of the settlements before the era of railroads, may be measured by the evolution of mills, by the increase in the number and size of stores, and by the evolution and development of roads

Courtesy of W. Va. Geological Survey.

OLD-FASHIONED WATER-POWER MILL (Summers County).

and ferries and methods of transportation—as well as by the changes in farm implements and machines and the general development of agriculture. Before 1807 there was a greater demand for the construction of mill dams, ferries, and smelting furnaces than for internal communication with the East. The manufacture of salt especially began to emancipate the West from the East. In 1797 the first salt furnace on the Great Kanawha was set up. In 1807 the method of manufacture, improved by the Ruffner brothers, increased the quantity of the product and soon made the "Kanawha Salines" widely known. The industry furnished an occupation for many people, some of whom built keel boats and distributed the manufactured products along the Ohio and its tributaries. In 1814, about 600,000 bushels were produced.

The earliest mills, the "tub mills," which were built in the oldest trans-Allegheny settlements about 1779 or 1780, began to be superseded between 1795 and 1800 by the better water grist-mill (equipped with country stones) which in time retreated before the steam mills. Before 1807, the construction of dams across the Monongahela was first regulated by the Virginia legislature by an act of December 5, 1793 and later by act of February 3, 1806. Many such dams were found along the streams of the settled regions by 1820. When the first official examination and partial survey of the Monongahela river was made in 1820, under the direction of the Virginia Board of Public Works, beginning a mile below the Lewis county court house and continuing to the Pennsylvania line, there were between those points (nearly 107 miles) ten dams—usually mill dams.

Stores at first kept only a few goods which had been carried over the mountain on a pack horse. At a later period they were supplied with a larger stock brought by wagon from eastern markets or (first by wagon and later by boat) from Pittsburg. With the stores developed villages and towns, some of which showed considerable economic and social development by 1830 and thereafter.

The manufacture of iron became an important industry in the northwest (e. g. Jackson's works on Cheat). Sheep raising became a profitable industry in the counties on the upper Ohio and on the Monongahela. Wheeling became a city of nails and woolen mills. The importance of salt and the facilities of the manufacturing towns were increased by the application of steam to water navigation.

From 1800 to 1830 the number of counties increased from thirteen to twenty-three.

By 1830 there were many little towns in which merchants kept a stock of merchandise. Here were the homes of lawyers, physicians and

ministers, and in each class were men of brilliant intellects. In the river valleys and on the rich uplands dwelt by far the larger part of the population—farmers who, in addition to producing corn, wheat, buckwheat, potatoes and fruits for their own use, generally had a surplus to sell to others, and also raised good horses, cattle, sheep and hogs. Still another class dwelt in the "hill country" where they built their cabin homes and cleared a few acres of land on which they produced grains and vegetables sufficient for their own needs from year to year; they had but few domestic animals, and for other food they depended largely on wild game and fish. Periodically they visited the towns, there to barter venison, skins, furs, maple sugar and ginseng, for clothing, coffee, medicines, ammunition and other necessities, and then returned to their homes to follow the same routine to the end of their lives.

The development of transportation, confronted with many obstacles, was determined largely by the pressing needs of the growing communities. After the Braddock and Forbes roads, the first road affecting the Monongahela region was cleared from the South Branch to Fort Pitt along the general route of the Braddock road by commissioners appointed by the general assembly in 1766. The first road connecting directly with the Monongahela region of Virginia was the "state road" from Winchester via Romney to Morgantown, authorized by the legislature previous to 1786 when a branch wagon road, from a point near Cheat to Clarksburg, was also authorized. Over this route there was probably no wagon traffic for many years. A wagon was driven from Alexandria over the road to Morgantown as early as 1796. In 1786 the legislature also authorized the opening of roads from Morgantown to the mouth of Fishing creek, and from the state road in Harrison county to the mouth of the Little Kanawha. Among the other earlier authorized roads, which at first were little more than trails, was one from Morgantown to the mouth of Graves creek in 1795, one from Clarksburg to Point Pleasant in 1806, one from the Monongahela Glades to the mouth of Buffalo and to the Ohio in 1812, one from Beverly via Clarksburg and Middlebourne to Sistersville in 1817, and a turnpike from Staunton (via Jackson river, Huttonsville and Beverly) to Booth's Ferry on Tygart's Valley in 1818. The first post roads were opened to Morgantown and Wheeling at which the first post offices were established in 1794. Morgantown and Clarksburg advertisements and news, which before 1797 found their only avenue of newspaper publication in the Pittsburg Gazette, appeared in the Fayette Gazette from 1797 to 1804 at which date a paper was established at Morgantown. In 1806, Virginia gave aid to repair a post

road in Randolph county. Ferries, which began to appear by 1776, were established in 1785 at other points, and by 1803 were operated over the Ohio and Little Kanawha at Parkersburg (also over the mouth of Fishing creek and the Guyandotte, and over the Great Kanawha at the mouth of Coal, and at other places). Toll bridges which began to appear by 1807 were considerably increased in number from 1816 to 1819. The completion of the National Road from Cumberland to the Ohio at Wheeling in 1818 stimulated progress in its vicinity for branch roads to intersect it, and farther south for competing roads between Virginia towns and the Ohio.

The need of river improvement was felt early. In 1785, a portion of the Potomac was cleared of rocks at Harper's Ferry.

River transportation to Pittsburg or to nearer points began at a very early period. In 1793, the Virginia legislature passed the first act for clearing and extending the navigation of the Monongahela and West Fork rivers for the convenient passage of canoes and flat boats. In January 1800, it declared the Monongahela a public highway. Soon thereafter both through private individual initiative, and possibly in part through the report of Secretary Gallatin on internal navigation, the question of river improvements to secure better navigation was seriously considered. The subject received new significance from the development of steam navigation on the Ohio after the trial trip of 1811-12. In January 1817 the Monongahela Navigation Company was incorporated by the legislature to make the West Fork and Monongahela rivers navigable for flatboats, rafts, and lumber, and with authority to cut a canal to divert the waters of the Buckhannon to the waters of the West Fork in order to secure an additional supply of water. A survey from Weston to the Pennsylvania line was made in 1820. The company under the energetic lead of John G. Jackson began its work on West Fork even before the survey was made, but soon abandoned the enterprise after the destruction of some of its dams by a river freshet, and finally forfeited its rights and franchises. Steamboats from Pittsburg began to make regular trips to Morgantown about 1826; but the ascent to Fairmont, first made in 1850, was more difficult, although in 1854 and thereafter regular trips were made at periods of high water. Improvement of the river above the Pennsylvania line, strongly urged in the ante-bellum decade, was postponed until the beginning of Congressional appropriations for the work in 1872.

Propositions to improve the two Kanawhas by slack water navigation were urged in 1820, resulting in the first legislation for improvement

on the Great Kanawha. In 1819 the first steamboat on the Kanawha, the "Robert Thompson," ascended to Red House. By its inability to ascend above that point Virginia was induced to direct the James river and Kanawha company to improve the navigation of the river so that three feet of water could be secured all the year to the Kanawha Falls, to which the company was also directed to construct a turnpike across the mountains. In 1820 the "Albert Donnally" ascended to Charleston, and the traffic by river thereafter steadily increased. Packets between Charleston and Gallipolis, which at first ran weekly and later triweekly, in 1845 began a daily service which continued until the civil war. In 1839 a survey of the Little Kanawha was made from its mouth to Bulltown salt works above Elizabethtown.

In 1830 the assembly was flooded by petitions from the West urging the incorporation of internal improvement companies, and approppriations for turnpikes, or for permission to raise money by lotteries. In the decade after 1830 the question of roads which had already become prominent, assumed a position of dominating importance. The construction of the Northwestern Turnpike and the Staunton and Parkersburg Turnpike, stimulated the construction of intersecting roads—and in various ways exerted on the social and economic development, in almost every part of the Monongahela region, an influence which continued until the greater changes wrought by the advent of the railroad. About 1852 many bridges were built across streams at important crossings.

That the route of the first railroad to the Ohio would pass through the northern Virginia counties was practically determined by the James-Kanawha River enterprise which largely absorbed the money which might have been used for internal improvements in other parts of the state. Finally, after various delays and the consideration of several different routes, in 1852 the construction of the first line of the Baltimore and Ohio was completed via Fairmont to Wheeling, and in 1857 the Northwestern branch intersecting the older line at Grafton was completed via Clarksburg and Salem to Parkersburg—constituting a rival to the great Northwestern turnpike. By furnishing improved facilities for transportation, these roads, which touched both the throbbing pulse of the great metropolis of the East and the streams of life in the growing West, soon began to produce wonderful changes affecting the material interests and the social life—and may be regarded as the entering wedge in the larger development of the region through which they passed.

Material development, in the larger sense, in 1861 was largely confined to the immediate vicinity of the railway and the Ohio.

The growth of population by decades to 1860 is indicated by counties in the following table:

1790	1800	1810	1820	1830	1840	1850	1860	County	Date Formed
7,346	8,348	9,784	10,889	11,279	12,245	14,036	13,913	Hampshire	1754
19,713	22,006	11,479	11,211	10,518	19,972	11,771	12,525	Berkeley	1772
4,768	8,540	12,793	11,060	14,056	17,368	12,357	13,048	Monongalia	1776
5,212	4,740	8,175	9,182	15,584	13,357	18,006	22,422	Ohio	1776
6,015	4,345	5,914	7,041	9,006	8,695	10,022	12,211	Greenbrier	1777
2,080	4,848	9,958	10,932	14,722	17,669	11,728	13,790	Harrison	1784
7,336	6,627	5,525	5,700	6,798	7,622	9,543	9,864	Hardy	1786
951	1,826	2,854	3,357	5,000	6,208	5,243	4,990	Randolph	1787
2,454	3,962	4,239	4,846	6,271	6,940	5,797	6,164	Pendleton	1788
.....	3,239	3,866	6,399	9,326	13,567	15,353	16,151	Kanawha	1789
.....	4,706	5,843	6,631	7,041	7,948	5,054	5,494	Brooke	1797
.....	1,217	3,036	5,860	6,429	7,923	9,450	11,046	Wood	1799
.....	4,188	5,444	6,580	7,798	8,422	10,204	10,757	Monroe	1799
.....	.....	11,851	13,087	12,927	14,082	15,357	14,535	Jefferson	1801
.....	.....	1,991	4,868	6,534	6,777	7,539	9,173	Mason	1804
.....	.....	2,717	4,789	5,884	8,163	6,299	8,020	Cabell	1809
.....	.....	.....	2,314	4,104	6,954	5,498	6,517	Tyler	1814
.....	.....	.....	4,247	6,241	8,151	10,031	7,999	Lewis	1816
.....	.....	.....	1,853	3,346	2,255	3,963	4,627	Nicholas	1818
.....	.....	.....	3,422	5,144	6,866	11,708	13,312	Preston	1818
.....	.....	.....	2,500	2,694	4,253	3,557	3,732	Morgan	1820
.....	.....	.....	.....	2,542	2,922	3,598	3,958	Pocahontas	1821
.....	.....	.....	.....	3,680	4,309	3,620	4,938	Logan	1824
.....	.....	.....	.....	.....	4,890	6,544	8,306	Jackson	1831
.....	.....	.....	.....	.....	3,924	3,955	5,997	Fayette	1831
.....	.....	.....	.....	.....	6,937	10,138	12,937	Marshall	1835
.....	.....	.....	.....	.....	2,575	4,212	4,992	Braxton	1836
.....	.....	.....	.....	.....	2,233	4,222	6,819	Mercer	1837
.....	.....	.....	.....	.....	.....	10,552	12,722	Marion	1842
.....	.....	.....	.....	.....	.....	4,760	6,747	Wayne	1842
.....	.....	.....	.....	.....	.....	9,005	8,958	Barbour	1843
.....	.....	.....	.....	.....	.....	3,902	6,847	Ritchie	1843
.....	.....	.....	.....	.....	.....	5,357	8,463	Taylor	1844
.....	.....	.....	.....	.....	.....	2,750	5,203	Doddridge	1845
.....	.....	.....	.....	.....	.....	3,475	3,759	Gilmer	1845
.....	.....	.....	.....	.....	.....	4,282	6,703	Wetzel	1846
.....	.....	.....	.....	.....	.....	3,237	4,840	Boone	1847
.....	.....	.....	.....	.....	.....	5,335	6,301	Putnam	1848
.....	.....	.....	.....	.....	.....	3,353	3,751	Wirt	1848
.....	.....	.....	.....	.....	.....	4,050	4,445	Hancock	1848
.....	.....	.....	.....	.....	.....	1,765	3,367	Raleigh	1850
.....	.....	.....	.....	.....	.....	1,645	2,861	Wyoming	1850
.....	.....	.....	.....	.....	.....	.....	2,945	Pleasants	1851
.....	.....	.....	.....	.....	.....	.....	7,292	Upshur	1851
.....	.....	.....	.....	.....	.....	.....	2,502	Calhoun	1855
.....	.....	.....	.....	.....	.....	.....	1,787	Clay	1856
.....	.....	.....	.....	.....	.....	.....	5,381	Roane	1856
.....	.....	.....	.....	.....	.....	.....	1,428	Tucker	1856
.....	.....	.....	.....	.....	.....	.....	1,535	McDowell	1858
.....	.....	.....	.....	.....	.....	.....	1,555	Webster	1860
.....	.....	.....	.....	.....	.....	.....	.....	Mineral	1866
.....	.....	.....	.....	.....	.....	.....	.....	Grant	1866
.....	.....	.....	.....	.....	.....	.....	.....	Lincoln	1867
.....	.....	.....	.....	.....	.....	.....	.....	Summers	1871
.....	.....	.....	.....	.....	.....	.....	.....	Mingo	1895
55,873	78,592	105,469	136,768	176,924	227,227	302,273	376,888		

The composition and condition of the population in 1850 is partially indicated by the following statistics from the census of that year:

Counties	White		Colored		Number of Dwellings (excluding slaves)	Number of Families (excluding slaves)
	Male	Female	Free	Slave		
Barbour	4,380	4,290	222	133	1,467	1,467
Berkeley	4,974	4,592	249	1,956	1,668	1,703
Boone	1,603	1,451	.....	183	495	495
Braxton	2,111	2,012	.....	89	679	679
Brooke	2,490	2,433	100	31	839	839
Cabell	2,974	2,928	8	389	976	976
Doddridge	1,396	1,322	1	31	525	525
Fayette	1,923	1,857	19	156	593	593
Gilmer	1,776	1,627	.....	72	571	571
Greenbrier	4,315	4,234	156	1,317	1,419	1,419
Hampshire	6,251	5,858	224	1,433	2,035	2,035
Hancock	2,124	1,916	7	3	590	590
Hardy	4,085	3,842	356	1,260	1,327	1,340
Harrison	5,674	5,539	27	488	1,866	1,866
Jackson	3,405	3,075	11	53	1,034	1,040
Jefferson	5,453	5,023	540	4,341	1,960	2,000
Kanawha	6,278	5,723	212	3,140	2,110	2,160
Lewis	4,852	4,768	43	368	1,533	1,533
Logan	1,866	1,667	.....	87	572	572
Marion	5,200	5,239	19	94	1,786	1,791
Marshall	5,087	9,963	39	49	1,668	1,678
Mason	3,562	3,279	51	647	1,151	1,173
Mercer	2,051	1,967	27	177	655	655
Monongalia	5,987	6,105	119	176	2,124	2,124
Monroe	4,584	4,477	81	1,061	1,576	1,576
Morgan	1,753	1,678	3	123	606	606
Nicholas	1,974	1,915	1	73	602	602
Ohio	8,981	8,631	230	164	3,097	3,178
Pendleton	2,771	2,672	30	322	891	891
Pocahontas	1,675	1,628	28	267	553	557
Preston	6,943	4,619	59	87	1,664	1,664
Putnam	2,408	2,285	10	632	788	819
Raleigh	899	830	13	23	296	296
Randolph	2,561	2,442	9	201	844	844
Ritchie	1,983	1,903	.....	16	649	649
Taylor	2,697	2,433	69	168	818	823
Tyler	2,778	2,678	4	38	949	948
Wayne	2,450	2,114	7	189	749	790
Wetzel	2,183	2,078	6	17	716	716
Wirt	1,695	1,624	2	32	528	528
Wood	4,664	4,344	69	373	1,554	1,554
Wyoming	811	772	1	61	248	248

The census of 1850 contains the following statistics of towns in the territory later included in West Virginia:

Towns	Counties	White		Colored		Total
		Male	Female	Free	Slave	
Bolivar	Jefferson	479	469	60	46	1,054
Charlestown	Jefferson	515	490	166	386	1,507
Charleston	Kanawha	403	341	54	252	1,050
Clinton	Ohio	159	154	.....	.....	313
Fairmont	Marion	324	328	4	27	683
Fulton	Ohio	129	137	.....	.....	266
Harpers Ferry	Jefferson	806	745	87	109	1,747
Martinsburg	Berkeley	995	891	44	260	2,190
New Martinsville	Wetzel	119	104	5	.....	228
Parkersburg	Wood	575	577	29	37	1,218
Ritchieton	Ohio	586	481	4	.....	1,071
Shepherdstown	Jefferson	619	633	60	249	1,561
Smithfield	Jefferson	173	176	2	95	446
Triadelphia	Ohio	121	1,199	2	.....	242
Wheeling	Ohio	5,660	5,519	212	44	1,1435
West Liberty	Ohio	105	109	5	.....	219

The following school statistics, compiled from the census of 1850 indicate considerable interest in primary and secondary education:

COUNTIES	COLLEGES				PUBLIC SCHOOLS				ACADEMIES			
	Number	Number Teachers	Number Pupils	Total Income	Number	Number Teachers	Number Pupils	Total Income	Number	Number Teachers	Number Pupils	Total Income
Barbour	..	..	...	.....	56	56	546	$ 570	..	..	...	.....
Berkeley	..	..	...	.....	22	22	550	827	4	4	102	$7,363
Boone	..	..	...	.....	7	7	171	586	..	..	...	.....
Brooke	1	5	130	$7,500	2	2	60	.....	1	2	73	970
Cabell	..	..	...	.....	11	11	374	2,020	1	1	20	300
Doddridge	..	..	...	.....	16	16	115	160	..	..	...	.....
Fayette	..	..	...	.....	5	6	96	569	..	..	...	.....
Gilmer	..	..	...	.....	18	18	159	954	..	..	...	.....
Greenbrier	..	..	...	.....	60	60	900	729	1	1	30	600
Hampshire	..	..	...	.....	50	50	1,500	5,500	2	8	145	3,230
Hancock	..	..	...	.....	5	13	360	1,000	1	1	25	400
Hardy	..	..	...	.....	38	38	622	550	3	3	57	38
Harrison	..	..	...	.....	71	71	330	820	1	2	60	900
Jackson	..	..	...	.....	45	45	1,350	250	..	..	...	.....
Jefferson	..	..	...	.....	27	27	1,000	7,628	7	10	165	.....
Kanawha	..	..	...	.....	65	65	1,500	3,933	6	6	162	3,823
Lewis	..	..	...	.....	47	47	1,602	500	..	..	...	.....
Logan	..	..	...	.....	10	10	175	640	..	..	...	.....
Marion	..	..	...	.....	34	34	720	790	..	..	...	.....
Marshall	..	..	...	.....	25	25	700	1,180	1	3	60	1,080
Mason	..	..	...	.....	31	31	1,150	527	..	..	...	.....
Mercer	..	..	...	.....	22	20	400	800	..	..	...	.....
Monongalia	..	..	...	.....	34	34	907	2,139	2	6	109	3,334
Monroe	..	..	...	.....	26	26	498	3,452	1	3	75	888
Morgan	..	..	...	.....	22	22	645	411	..	..	...	.....
Nicholas	..	..	...	.....	17	17	189	230	..	..	...	.....
Ohio	..	..	...	.....	33	46	3,520	24,247	7	20	400	5,265
Pendleton	..	..	...	.....	16	16	225	.....	..	..	...	.....
Pocahontas	..	..	...	.....	10	10	200	.....	1	2	40	.....
Preston	..	..	...	.....	42	42	840	675	2	3	70	600
Putnam	..	..	...	.....	4	4	115	1,090	1	1	...	1,600
Randolph	..	..	...	.....	16	16	380	750	..	..	...	.....
Ritchie	..	..	...	.....	18	18	376	196	..	..	...	.....
Taylor	1	2	100	500	..	..	....	.....	..	..	...	.....
Tyler	..	..	...	.....	5	5	145	381	..	..	...	.....
Wayne	..	..	...	.....	11	11	203	472	..	..	...	.....
Wetzel	..	..	...	.....	2	2	78	20	..	..	...	.....
Wirt	..	..	...	.....	30	30	600	1,074	..	..	...	.....
Wood	..	..	...	.....	17	17	293	82	2	5	130	10

The following libraries, other than private, were reported in the census of 1850:

County	No.	Number Vols.	Character
Brooke	2	3,000	College
Cabell	1	300	Public
Hampshire	1	1,000	Public
Marshall	1	600	Sunday School
Marshall	1	110	Church
Monongalia	1	150	School
Taylor	1	2,500	College
Wayne	2	75	Public
Wetzel	1	100	Sunday School

ILLITERACY, 1850.

The number of adults who could neither read nor write in 1850 is indicated by counties in the following table of illiteracy.

County	White			Colored					
	Male	Female	Total	Male	Female	Total	Native	Foreign	Aggregate
Hampshire	546	645	1,191	50	40	90	1,281	.....	1,281
Berkeley	177	203	380	45	31	76	456	.....	456
Monongalia	343	861	1,204	7	4	11	1,208	7	1,215
Ohio	102	43	145	.....	.....	.....	86	59	145
Greenbrier	278	581	859	.....	.....	.....	846	13	859
Harrison	78	228	306	.....	.....	.....	306	.....	306
Hardy	355	655	1,010	55	58	113	1,123	.....	1,123
Randolph	185	416	601	.....	.....	.....	591	10	601
Pendleton	379	752	1,131	9	6	15	1,120	26	1,146
Kanawha	680	912	1,592	33	25	58	1,647	3	1,650
Brooke	89	127	215	22	14	36	209	43	252
Wood	111	140	251	22	22	44	293	2	295
Monroe	316	564	880	.....	.....	.....	878	2	880
Jefferson	178	266	444	.....	.....	.....	415	29	440
Mason	410	584	994	.....	.....	.....	994	.....	994
Cabell	245	398	643	3	2	5	647	1	648
Tyler	210	368	578	.....	.....	.....	570	8	578
Lewis	325	758	1,084	.....	.....	.....	1,072	11	1,083
Nicholas	26	26	52	.....	.....	.....	52	.....	52
Preston	386	460	846	5	8	13	700	159	859
Morgan	175	261	436	.....	.....	.....	405	31	436
Pocahontas	34	66	100	.....	.....	.....	100	.....	100
Logan	275	402	677	.....	.....	.....	677	.....	677
Jackson	323	534	857	3	1	4	845	16	861
Fayette	138	231	369	1	2	3	370	2	372
Marshall	390	641	1,031	.....	.....	.....	1,007	24	1,031
Braxton	121	195	316	.....	.....	.....	315	1	316
Mercer	211	367	578	.....	.....	.....	576	2	578
Marion	366	809	1,175	2	3	5	1,177	3	1,180
Wayne	199	294	493	2	1	3	496	.....	496
Ritchie	102	205	307	.....	.....	.....	304	3	307
Taylor	51	56	107	4	1	5	112	.....	112
Doddridge	103	196	299	.....	.....	.....	299	.....	299
Gilmer	152	175	327	.....	.....	.....	327	.....	327
Wetzel	227	406	633	.....	.....	.....	633	.....	633
Boone	219	332	551	.....	.....	.....	548	3	551
Putnam	350	488	838	.....	4	4	840	2	842
Wirt	33	32	65	.....	1	1	65	1	66
Hancock	55	128	183	.....	.....	.....	158	25	183
Raleigh	49	53	102	.....	.....	.....	102	.....	102
Wyoming	111	166	277	.....	.....	.....	277	.....	277

CHURCHES.

COUNTY	BAPTIST			METHODIST			PRESBYTERIAN			EPISCOPAL			LUTHERAN			CATHOLIC			TOTALS.		
	No.	Seating Capacity	Value of Church Property.	No.	Seating Capacity	Value of Church Property.	No.	Seating Capacity	Value of Church Property	No.	Seating Capacity	Value of Church Property.	No.	Seating Capacity	Value of Church Property	No.	Seating Capacity	Value of Church Property	No.	Seating Capacity	Value of Church Property.
Hampshire	5	1,200	$ 1,000	15	4,000	$ 5,000	6	3,000	$ 5,000	3	1,500	$ 1,800	1	400	$1,000	..	.....	$.....	33	10,800	$ 14,750
Berkeley	2	500	1,100	13	2,945	9,650	6	2,000	7,600	4	900	7,000	3	650	5,600	..	.....	.....	30	7,595	35,150
Monongalia ...	6	2,010	4,100	19	7,800	13,008	6	2,000	7,200	..	.....	.....	..	.....	.....	..	.....	.....	31	12,310	19,808
Ohio	1	600	4,000	5	2,950	28,500	5	2,600	33,400	2	1,050	26,000	1	500	3,000	1	1,300	23,000	15	9,000	117,900
Greenbrier	3	800	4,000	13	5,000	10,000	6	3,000	9,500	..	.....	.....	..	.....	.....	..	.....	.....	22	8,800	23,000
Harrison	5	1,000	2,050	10	2,500	5,100	1	400	1,800	..	.....	.....	..	.....	.....	..	.....	.....	19	4,600	12,150
Hardy	..	.....	.....	4	1,300	6,200	2	700	7,500	..	.....	.....	..	.....	.....	..	.....	.....	18	4,400	19,500
Randolph	1	200	300	7	1,550	1,275	2	700	2,300	..	.....	.....	..	.....	.....	..	.....	.....	10	2,450	3,875
Pendleton	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	2	600	600	..	.....	.....	12	3,300	4,250
Kanawha	11	3,950	3,900	12	3,850	9,500	2	1,200	8,000	3	1,450	12,500	..	.....	.....	..	.....	.....	28	10,450	33,900
Brooke	3	1,050	3,800	5	1,200	3,500	1	400	3,000	2	700	4,200	..	.....	.....	..	.....	.....	11	3,350	14,500
Wood	7	1,950	3,700	11	2,675	8,300	1	550	5,000	2	700	5,450	..	.....	.....	1	400	2,200	22	6,275	24,650
Monroe	7	2,600	6,250	12	3,425	4,525	6	200	7,200	..	.....	.....	..	.....	.....	..	.....	.....	29	8,575	19,425
Jefferson	1	300	500	6	3,600	12,500	4	2,900	11,500	3	1,500	11,000	1	600	4,000	1	600	2,000	20	10,650	50,100
Mason	4	1,750	1,500	4	650	700	3	1,100	2,900	1	100	800	..	.....	.....	..	.....	.....	12	3,600	5,900
Cabell	5	1,450	2,200	9	2,300	3,600	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	14	3,750	5,800
Tyler	2	900	1,200	4	1,600	1,500	1	500	700	..	.....	.....	..	.....	.....	..	.....	.....	7	3,300	3,400
Lewis	1	600	400	11	4,500	3,075	1	450	300	1	400	2,000	..	.....	.....	1	400	2,000	15	6,300	7,775
Nicholas	1	400	400	7	2,100	1,400	..	.....	.....	..	.....	.....	..	.....	.....	1	150	200	9	2,650	2,000
Preston	6	900	1,200	11	1,150	7,200	1	200	1,000	..	.....	.....	..	.....	.....	2	600	1,200	28	4,500	13,325
Morgan	1	200	250	8	1,450	4,700	..	.....	.....	1	400	2,000	..	.....	.....	1	400	2,000	15	6,300	7,775
Pocahontas	..	.....	.....	5	1,900	2,000	2	800	1,250	..	.....	.....	..	.....	.....	..	.....	.....	7	2,700	3,250
Logan	2	500	300	4	1,200	1,600	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	6	1,700	1,900
Jackson	..	.....	.....	8	800	5,000	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	8	800	5,000
Fayette	3	800	800	3	900	425	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	6	1,700	1,225
Marshall	2	500	800	9	2,975	6,800	3	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	15	4,850	11,125
Braxton	..	.....	.....	2	600	400	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	2	600	400
Mercer	2	600	200	2	500	150	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	4	1,100	350
Marion	3	1,300	950	17	6,600	7,950	1	600	3,000	..	.....	.....	..	.....	.....	..	.....	.....	21	8,500	11,900
Wayne	4	850	400	15	1,450	1,425	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	9	2,300	1,825
Ritchie	1	250	350	3	750	750	1	200	300	..	.....	.....	..	.....	.....	..	.....	.....	5	1,200	1,400
Taylor	5	2,150	2,600	6	2,200	3,600	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	11	4,350	6,200
Doddridge	..	.....	.....	1	200	500	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	1	200	500
Gilmer	1	300	350	4	900	650	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	5	1,200	1,000
Wetzel	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....
Boone	1	200	300	5	655	880	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	6	855	1,180
Putnam	9	2,200	2,550	3	1,350	1,600	..	.....	.....	1	350	650	..	.....	.....	..	.....	.....	13	3,900	4,800
Wirt	4	200	600	8	1,600	1,050	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	13	2,050	2,050
Hancock	1	350	600	4	900	2,100	3	1,550	3,400	..	.....	.....	..	.....	.....	..	.....	.....	8	2,800	6,100
Raleigh	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....
Wyoming	1	100	50	1	160	150	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	2	260	200

2. EASTERN PANHANDLE.

In the eastern panhandle, by 1800, many homes of thrift and industry bore evidence of their location in an older established community.

Shepherdstown which during the Revolution, became a busy center of traffic and travel, and of domestic manufacture, and after the Revolution had large aspirations expressed in the steamboat experiments of Rumsey* and a bid to secure the location of the national capital, retained its local importance in the county for many years. Its later decline was attributed to the construction of the Baltimore and Ohio railway. In 1860, it lost its best factory and the population was 400 less than in 1850. At Harpers Ferry, by an act of Congress of 1794, a national arsenal and gun factory was erected in 1799.

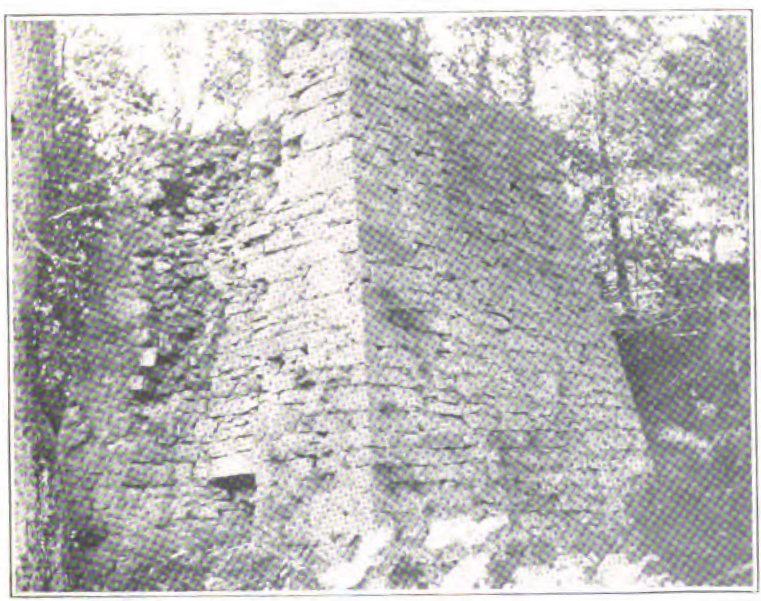
Better communications for the South Branch region were not long delayed. As early as 1790 there were eight ferries in Hampshire county. In 1801 plans were begun for the construction of a road from Romney through Berkeley county to Washington, D. C. In 1802 commissioners were designated to meet at the mouth of New creek to begin the marking of a new road from the Maryland road near Gynn's Tavern through Hampshire and Berkeley counties to Key's Ferry on the Shenandoah.

Beginning at an early period and continuing until about 1830, flatboats from Moorefield and lower points of the fertile valley of the South Branch floated down to tidewater on the Potomac with flour and with iron from Hampshire. The principal markets for the flour were Washington and Alexandria. Farther up the stream, Franklin (earlier Frankford), the first county seat of Pendleton (formed 1788), incorporated in 1794, grew slowly but steadily. By 1834, it had two stores, two tanyards, three saddlers, two blacksmith shops, a furniture shop, three shoemakers, one tailor, two lawyers and one physician. It also had a school and a temperance society.

The first stage line in Hampshire was established between Winchester and Cumberland in 1830. The pike from Green Spring to Moorefield was built by a stock company about 1850, the state taking two-fifths of the stock. Stages from Romney to the Ohio reached Clarksburg in one day and Parkersburg in two.

*It appears that James Rumsey was employed in September, 1781, by the Potomac company (of which Washington was a member) to improve the navigation of the Potomac. In the summer of the year 1783, he directed his attention to the subject of steamboats; and in the autumn of 1784 succeeded in a private, but very imperfect, experiment of the Potomac at Shepherdstown in order to test some of the principles of his invention. In October 1784 he obtained from the Virginia Assembly an act guaranteeing to him the exclusive use of his invention in navigating the waters of that state for ten years. In January, 1785, he obtained a similar patent from the general assembly of Maryland. Finally, in 1786, at Shepherdtown, he gave a public trial of his boat, succeeding in propelling it by steam against the current at the rate of about four miles per hour.

An Old Suspension Bridge.



An Old Iron Furnace (Hardy County).

Martinsburg (the county seat of Morgan which was formed from Hampshire and Berkeley in 1820) received new life and fresh impetus in 1835 from the large camp of the surveying corps which located the route of the Baltimore and Ohio railway, and later (1841) from the stores of railway contractors and the trade of the Irish and German who graded and bridged the road. In 1842, the track layers passed through the town, followed by a pioneer steam engine whose first piercing whistle completely disorganized the local militia. In 1849, the town became a first class railway station with engine house and machine shops under construction. In 1854, it became the terminus of a turnpike from Winchester. In 1856, it was incorporated and had hope of becoming the terminus of the Cumberland Valley railroad connecting with Chambersburg. In 1859 it had a population of 3000.

Throughout the region along the Potomac, the Chesapeake and Ohio canal exerted a great influence. In 1838, the rioting laborers on the canal quit work and marched from Hancock toward Old Town, causing the "terrorized" inhabitants of the neighboring region to take measures for defense by a request upon the governor for arms. By June 13, 1850, the canal was completed to the head of navigation at Cumberland. Although navigation on the canal was suspended during the winter, causing much produce to accumulate at Williamsport, business was brisk at other seasons. Within the week before April 22, 1854, sixty-three boats (6660 tons) left Cumberland for Alexandria.

Piedmont was laid out by the New Creek company and incorporated in 1856. Its earliest basis and stimulus was the Baltimore and Ohio railway, which reached the site of the future town in 1851. Its earlier growth was largely due to Henry G. Davis who, on assuming the duties of station agent of the railway at that point in 1854, and by his keen foresight grasping its industrial and commercial advantages, established his brothers in the coal and lumber business; and four years later (1858), on resigning his position with the railroad, became the head of the firm and organized the Piedmont Savings Bank of which he became president.

The site of Keyser at New creek was merely developed as a farm before the war in which it became a strategic position. The town, established after the war largely through the energy of Henry G. Davis, received its larger stimulus to growth through its selection as the county seat of Mineral county, which was formed from Hampshire county in 1866.

3. MIDDLE NEW RIVER AND GREENBRIER.

In the Middle New river region, beginning with the formation of Monroe county in 1799 and the establishment of a post office at Union in 1800, there was a slow but steady development of industry and other evidences of civilization. Beginning about 1832, an impetus to trade and travel was given by the incorporation and construction of turnpikes such as (1) the Price mountain and Cumberland Gap, (2) the Wayne, Raleigh and Grayson, and (3) the Giles, Fayette and Kanawha.

In 1837, Mercer county was formed in response to a petition of the people living along the Flat Top mountain, the Bluestone, and the upper waters of Brush creek, who complained of the inconvenience of the long journey to their old county seat. The first court house was built in 1839. In 1843 there were in the county only two voting places —Princeton and Pipestem.

Along the lower Greenbrier, development was more rapid. This development was influenced by location as well as by the character of the people and the character of the soil. Agricultural advance gave early prosperity. Lewisburg, at which the oldest church organization (Presbyterian) on western waters was formed in 1783, and the first church was erected in 1795, became prominent as an early center of culture and refinement.

Preparation of greater development farther west was made about 1790 by widening the old trail westward from Fort Union, and later by construction of the "old state road" which left the old trail several miles west of Lewisburg, crossed through Little Meadows, passed over Sewell mountain, crossed the New river at Bowyer's ferry, and thence, after passing through "Vandalia" (now Fayetteville) to Montgomery's ferry (Kanawha Falls), continued to follow the south side of the river.

On the upper Greenbrier, settlement developed more slowly. Huntersville, the first county seat of Pocahontas (formed 1821), was laid out in 1821 at the terminus of an early road leading from Warm Springs, and on the site of John Bradshaw's pioneer cabin which once served as headquarters for the pioneer hunters.

From the Greenbrier the development of settlements advanced westward both down the Kanawha and into the region which was formed into the new county of Nicholas in 1818 (from Kanawha, Greenbrier and Randolph). On upper Elk, at a few isolated interior clearings, new centers established a basis for the organization of Braxton county which was formed from Lewis, Kanawha and Nicholas in 1836. At Bulltown, the earlier residence of a small tribe of Indians (about

1780), salt was made as early as 1795. The earliest village in the region was established by act of 1826 as the town of Suttonsville, which in 1837 was changed to Sutton. Before 1836 it had scarcely a dozen inhabitants but was known by its post office name, Newville.

4. THE MONONGAHELA VALLEY.

In the earlier development of the large region of Virginia territory embraced in the drainage system of the Monongahela, the chief centers were Morgantown and Clarksburg. In 1776, this extent of territory was practically all included in Monongalia county. It was divided in 1784 by the creation of Harrison and later by the formation of Preston (1818) and of Marion (1842) which later furnished part of the territory for the creation of Taylor (1844). From the original territory of the Harrison of 1784 has been created Randolph (1787), Lewis (1816), Barbour (1843 from Harrison, Lewis and Randolph), Taylor (1844 from Harrison, Barbour and Marion), Upshur (1851 from Randolph, Barbour and Lewis) and Tucker (1856 from Randolph)—and small portions of its territory contributed to the creation of several other counties which do not belong to the topographical region drained by the Monongahela.

The industrial development* of Morgantown may be presented as a fitting introduction to that of the surrounding region. Beginning with perhaps no more than four log houses, a frame court house and jail, and a store and a grist mill on Decker's creek beyond the borough boundary, it grew little before 1791. In 1793 it became the terminus of a post route from Pittsburg established under the Pittsburg *Gazette* management, which distributed its papers by private post riders both before and after the United States mails reached Pittsburg in 1788. A post office was established in 1794 and a post route was designated from Hagerstown via Hancock and Cumberland to Morgantown, thence to Uniontown and Brownsville. Later the route was opened from Morgantown via Mt. Morris and Waynesburg to Wheeling. Ordinaries were licensed in 1796. Henry Dering who came from Lancaster, Pennsylvania via Hagerstown opened a hotel before 1800; and John Shisler who came from Winchester, Virginia in 1796 began to manufacture wagons by 1802. The first newspaper was established in 1803.

*The civic development is also interesting. In 1810 the first necessary step toward self-government was taken by making the trustees elective by the freeholders, and in 1816 they were given power to levy taxes. By the new charter of 1838 a government under trustees of more extended powers was inaugurated, resulting in an increasing number of ordinances—some of which, necessitating a serious break with long-established customs, met with fierce opposition. The latter illustrated by the "hog ordinance" which after a varied career as one of the chief municipal problems was finally settled by the referendum in the election of 1852, by which the hogs lost by 25 votes.

Buggy, carriage, and furniture manufacturing works were established in the decade after 1840. Tanbark was used in the local tanneries.

The town improved more rapidly from 1815 to 1830, largely influenced by growing trade with the region now included in Preston, Marion, Barbour and Taylor counties from which the people came to buy salt, iron and groceries. The first steamboat arrived from Pittsburg in 1826. In the decade after 1840 the town felt a decline of trade resulting especially from the construction of the Northwestern Turnpike in 1838, and the formation of Marion county in 1842—and, after the opening of the Baltimore and Ohio mail line in 1853, it lost the great interior wagon trade and could thereafter depend only on the local county trade until it could secure slack-water navigation or railway connection. Although the streets seemed deserted in comparison with their busy aspect of the thirties, closer touch was felt with the larger world by the establishment of a daily mail by 1851. Trade with the western end of the county was encouraged by the construction of a suspension bridge in 1854 by a company which had been organized four years earlier. Before 1853 Pittsburg was the main point for exchange of state bank paper, and in the absence of safe mails, payments were conveyed to eastern cities by private messengers. After 1853 money was sent by express from Fairmont until 1875 when a nearer express office was established at Fairchance. The population in 1865 was only 648. Telegraph connection was not opened until 1866, by a line from Pittsburg to Fairmont.

Probably the first road in Monongalia followed Decker's creek from Morgantown to Rock Forge, thence over the general route of the later Kingwood pike and across Cheat at Dunkard Bottom to the site of Westernport, Maryland and to Winchester. It was probably cleared as a pack-horse road between 1772 and 1776, and was later known as the State road or old Winchester road. Over it the early settlers brought salt and iron from Winchester (before the local iron works and Conemaugh salt), and after the Revolution it became an emigrant road to the West. Even as early as 1772 Michael Kern kept a boat yard at the mouth of Decker's creek for the accommodation of westward emigrants who followed this road to Morgantown—from which they continued their journey to Kentucky by the Monongahela and the Ohio. In 1784 the importance of trade with the Ohio, and of poltical connections between East and West, induced Washington to urge connection from the Potomac by a canal via Cheat to the nearest navigable point on the Monongahela, In 1791 the state road from Winchester was extended to the mouth of Fishing creek (now New Martinsville) and

soon became a wagon road from the mouth of Savage river (Westernport) to Morgantown. In 1812 the Monongalia Glades road was opened to Clarksburg via Smithton.

The first ferry established by law was located across Cheat at Andrew Ice's in 1785, others were established across the Monongahela in 1791 and 1792, and others across Cheat in 1792 and 1805. After January 1807 ferries were authorized by the county courts instead of by the general assembly.

In the earlier decades after the Revolution, population and development in Monongalia county increased rapidly in spite of the tide of immigration to Kentucky and Ohio. The population of 4000 in 1790 was more than doubled in a decade. In 1794 the people resisted the attempts to involve them in the Whiskey insurrection. After the military advance into western Pennsylvania, it appears that part of the Virginia division commanded by Governor Henry Lee returned via Morgantown, Winchester and Frankfort.

By 1810 the population had increased to 12,783, and the iron works on Cheat and on Decker's creek furnished a basis for prospective increase of material development restricted only by problems of transportation.

To encourage settlements, to meet the demand for connecting the interests of East and West, and for securing more direct commercial intercourse with the Ohio from which such commodities as salt could be obtained far more conveniently than by the overland route from Winchester or the water route from Pittsburg, in 1812 the legislature authorized the opening of a road from the Monongalia Glades (now in Preston county) via the mouth of Buffalo to the present site of New Martinsville which was to connect on the opposite bank of the Ohio with a road from Zanesville. The road, however, did not meet the expectations of its projectors, and in January 1817 new efforts for better communications resulted in the incorporation of the Monongahela Navigation company to secure better facilities in river transportation, but all efforts of the next few years to secure slackwater navigation failed.

The census of 1820 showed a decrease of 2000 in the population—a decrease only partially explained by the creation of Preston county with a population of 3000 in 1818. In 1823, all efforts to secure slackwater navigation having failed, attention was directed toward the question of canal communication between eastern and western waters. Three years later (on April 29) the first steamboat reached Morgantown, and by 1830 their continued arrival from Pittsburg, causing a

shifting of the old head-of-navigation dispute between Wheeling and Pittsburg, stimulated public demand for improvement of the Monongahela which was presented to Congress by Mr. Doddridge.

In 1830 the census showed an increase of 3000 white population since 1820. Morgantown became an educational center by the incorporation of Monongalia Academy in 1829 and the establishment of a female academy in 1832. Development in the western end of the county resulted in the establishment of Blacksville as a town; and growth of settlements further up the river, together with the demand for easier access to the county seat, resulted in petitions for the creation of Marion county which was accomplished in 1842.

In the decade from 1830 to 1840 the question of roads was still prominent. Earlier efforts were directed toward securing the survey of a road over the nearest and best route from a point on the Ohio between the mouth of Fishing creek and Marietta via Morgantown to the national road at or near the Youghiogheny bridge, and the establishment of a mail route with semi-weekly stages from Uniontown via Morgantown and Clarksburg to Parkersburg. The first enterprise was opposed in 1830 by Kingwood which seemed disposed to enlist Winchester, Romney, Westernport and Pruntytown against the establishment of the proposed new route.

The efforts of Monongalia to secure better means of communication were stimulated by neighboring improvements. In 1831 stages began to carry great western mail from Philadelphia to Pittsburg in three days. Pennsylvania by her canal, and Maryland by her railroad, were struggling for the western trade. It was evident that the completion of the canal would soon reduce freights and no one yet knew at what point on the Ohio between Pittsburg and the Kanawha the Baltimore and Ohio would terminate, but it seemed certain that either the Baltimore and Ohio railroad or the Chesapeake and Ohio canal would reach Cumberland which would thus become a deposit for western products. Therefore it was urged that Morgantown should push the opening of the road from the mouth of Fishing creek to Smithfield in the direction of Cumberland (via Monongalia county), and urge the opening of the navigation of the Monongahela, and secure the establishment of a bank. In 1836 the Brandonville and Fishing Creek turnpike was begun. Early in 1833 a line of four-horse stages was started between Morgantown and Uniontown by Colonel Johnson and a year later a tri-weekly mail in two horse stages was established between Uniontown and Clarksburg via Morgantown. The Morgantown and Clarksburg (and Ice's Ferry) turnpike was completed in 1840 via Smithton, and

the Brandonville and Fishing creek turnpike to Ice's Ferry and thence to the Pennsylvania line.

In 1840 the location and construction of turnpikes and bridges the chief subjects of local interest. The establishment of Ellicott's rolling mill at Ice's Ferry on Cheat (1840) furnished a new impetus to secure better roads and also to obtain slack-water navigation, first on the Monongahela and later on Cheat (1847). The Dunkard Creek turnpike projected in 1839 was revived in 1847 and located at Blacksville from whence it was later extended to Burton on the Baltimore and Ohio. The Morgantown and Bridgeport turnpike was authorized by act of 1849. The Kingwood, Morgantown and West Union (Aurora) turnpike, incorporated in 1848, was completed in 1851 partly on the location of the Morgantown and Clarksburg turnpike. The Pennsylvania, Beverly and Morgantown turnpike, incorporated in 1837 was revived in 1853 and constructed via Evansville. From Morgantown to Evansville, it was usually called the Evansville pike. The Masontown and Independence turnpike, incorporated in 1856, was built from a point on the road one mile west of Ice's Ferry.

Among the various industries of the county besides agriculture, for a half century after 1800, were the manufacture of iron (one of the earliest), the preparation of country millstones, the operation of carding and fulling mills, the manufacture of paper (begun 1839), the manufacture of pottery (which became important by 1830), carriage making (which became prominent after 1851), the operation of foundries, and the manufacture of furniture. As early as 1839 a rag paper mill was in operation in Morgantown.

By 1845 Morgantown contained about 150 dwellings, several stores and mills, two printing offices, two churches and an academy.

The iron works on Cheat near Ice's ferry were industrially important, furnishing employment for over 1200 persons. The manufactured products beyond the needs of the neighboring territory centering in the Morgantown market were sent on flatboats to Pittsburg. A gradual decline in the industry, beginning after 1846 and causing the failure of the Ellicotts in 1848 or in 1849, resulted in its termination in 1868.

Near the union of the Morgantown and Clarksburg branches of the state road leading to Winchester in 1800 was a wooded site well known as a camping place on the route so much used by early settlers of Kentucky who reached the Ohio at the fort opposite Marietta. The cluster of houses built there in 1807 was named Kingwood which was established as a town in 1811. The perceptible progress of settlement

around the town after 1813, and other changes of conditions resulted in the formation of Preston county in 1818 without objection of Monongahela. Kingwood, the oldest town, became the county seat.

The panther was retreating before the advance of the settler, although the wolf and the bear were still numerous beyond the margin of the settlements. Cattle raising which had begun as a business to meet the demands of the eastern market, and was encouraged by the completion of the National road between Cumberland and Wheeling in 1818, brought money into the community and stimulated new efforts toward new improvements—such as the water mills, the introduction of frame and stone buildings, and the beginning of mercantile business in the small village store. The frequent passage of immigrant teams on their way to Ohio indicated further improvement in the roads, and increasing travel stimulated new enterprises.

By 1845 Kingwood had about thirty dwellings and several stores. The chief staple of the county was Indian corn. Considerable sugar- and tobacco was also raised. In 1850 one of the first prominent woolen factories in Preston was established at Bruceton (originally called Morton's Mills). In 1840, the legislature incorporated the Preston Railroad, Lumber and Mining company, organized to operate in the lumber and mining business on Cheat. In 1850 it incorporated the Greenville Furnace company which transported its product by water from Cheat to Pittsburg and Cincinnati.

For the earliest settlers of the region centering around the mouth of Tygart's Valley river, Morgantown and Clarksburg were marketing centers; but, with the increase of improvements and the erection of mills along the streams, nearer stores were established, and, later, monthly communication with the outside world was secured by a regular mail route.

In 1819, Middletown (now Fairmont) was legally established and regularly plotted in a laurel thicket on the farm of Boaz Fleming—the roughest and poorest land in the vicinity. Its earliest development was partly determined by the need of a midway stopping-place for travellers betwen Morgantown and Clarksburg. Its later growth was due to the establishment of various industries in the vicinity—such as the fulling and carding mills of Barnes and Haymond which began operations in 1831. Its first newspaper was established about 1840.

In 1837 Rivesville was laid out upon the land of Elisha Snodgrass. In 1838, across the river from Middletown, was established Palatine at which the Marion machine works manufactured McCormick reapers

a decade before the civil war. In 1839 a town was plotted adjacent to the Boothsville postoffice which had been established in 1833 at Robert Reed's tavern near the forks of Booth's creek. Some of the smaller towns of the county are older than the county, but the larger number were established after the arrival of the railroad.

The attempt to secure the formation of a separate county in 1842, twenty-three years after the plan had first been proposed to the legislature, was successful in spite of considerable opposition in the legislature both from the delegates of Monongalia and those of Harrison. By 1845 Fairmont, the county seat, had seventy dwellings and five stores; and Palatine across the river had twenty-five dwellings and two stores. In the vicinity were located several flouring mills and other mills.

Early improvements developed more rapidly around the center at Clarksburg on the West fork. In December 1784, the Harrison county court ordered a bridle road opened from Clarksburg to Wickwires ford (below Fetterman) on Tygart's river. By 1790 commissioners were ordered to mark a road from the state road via Neal's station, near the mouth of the Little Kanawha to the Harrison and Kanawha county line—partly to meet the needs of travellers from Kentucky who left their canoes at "Belveal" and crossed by land from Neal's station to Clarksburg (often under direction of a pilot to keep them from losing their way). This connection with the Ohio, and another at Isaac Williams' opposite Marietta were made by William Haymond, Sr., and others between 1788 and 1790. In 1790 or 1791, cattle were collected at Clarksburg to drive through to the new Marietta settlement. In 1791 or 1792, beaver skins, buffalo skins, and bear skins and meat, were carried by canoe down the Little Kanawha and up the Ohio from Neal's station to Marietta.

In 1793 Clarksburg was the seat of an academy and by 1797 it contained about forty dwellings. By 1798 it had a post office. In the early days it was on a mail route between Gandy's (of Preston county) and Chillicothe via Salem, Webster, Marietta, Athens and Hewitts. By 1804 it had a wagon shop. At a very early date, too, it had a boat yard for the manufacture of large flat boats, which, before the era of railroads, were built at several points along West fork and floated to Pittsburg loaded with old iron, whiskey, grain, flour, lumber and country produce. In 1815 its first newspaper appeared. By 1818 its connections with a larger surrounding region were improved by the opening of new roads such as the road to Point Pleasant via the Elk river, and Booth's Ferry and Ohio turnpike from Philippi

via Clarksburg and Middlebourne to Sistersville. Its larger trade was always with the East, but by 1819 it received supplies of Bulltown salt, and perhaps also supplies of Kanawha salt which by this time found a market at Salem and other points northward. Although its citizens were of old Virginia descendants, its eastern trading and commercial relations were always with Baltimore which was more conveniently accessible than Richmond. By 1820 its most natural markets were either eastward across the mountains to Atlantic cities (250 or 350 miles distant), or down the Monongahela to the towns of the Ohic and the Mississippi. The transportation of breadstuffs in either direction was too expensive to yield a profit. Therefore, the surplus grain was fed to the horses, cattle or hogs which could transport themselves "on the hoof" to the eastern markets. By some labor the products of the forest—logs, boats, plank and staves—could have been a fruitful source of wealth, if the uncertainties and irregularities of navigation had not prevented them from reaching the market in time to meet the demand. The central position of the town making it a suitable place to collect articles for transportation to Brownsville and thence to Baltimore over the turnpike was one of the factors which induced the state to make a survey of the West fork and the Monongahela to the Pennsylvania state line in 1820. In 1830, during the dispute between the Baltimore and Ohio railway and the Chesapeake and Ohio canal, both of which planned to reach the Ohio, Philip Doddridge urged Congress to improve the Monongahela to Clarksburg.

By 1820 other early settlements were growing into towns of some importance. Among these were Salem, located on an early strategic site as a station for troops sent to watch the Indian trail leading from the Ohio up Middle Island creek and Long run to the settlements on the West fork. It was named by its first colony of forty families who arrived from Salem, New Jersey, before peace had been established with the Indians. On the site of Bridgeport, which probably received its first settlers (Joseph Davisson and others) between 1771 and 1774, the legislature in 1816 established a town which by 1845 contained twenty-five dwellings and two churches. Shinnston, at which the first settlement was made in 1773 by Levy Shinn and others, sturdy and independent Quakers from New Jersey, was first legally established as a town by legislative act of 1818. West Milford, the site of which had been included in tracts of land granted a decade earlier, gradually grew as a village clustering around the Clements mill which was erected in 1817, and received legal recognition as a town by legislative act of 1821.

Municipal improvement at Clarksburg did not keep pace with economic development. Jack Lovegood, in 1819, after a journey over the mountains, wrote a letter from the safe distance of the Youghiogheny Glades in Maryland, especially urging the need of a better cemetery, a hearse and better facilities for protection from fires. "I wondered," said he, "why the citizens of Clarksburg who are esteemed as a liberal and intelligent people have not a place to bury their dead secured by a fence from the intrusion of hogs and cattle." Perhaps his criticism caused the town ordinance which went into effect three months later prohibiting hogs from running at large.

According to J. H. DisDebar, who visited Clarksburg in 1846, the citizens were "a somewhat exclusive conservative set with all the traditions and social prejudices pertaining to an ancient moss-grown aristocratic town" with pretentions "by common consent founded upon antiquity of pedigree and superior culture and manners."

In 1845 the town had a population of 1100, seven stores, two newspaper offices, two churches and two academies, and the county had an estimated mineral wealth which was already regarded as an element of prosperity.

Connection with the National road by a line of coaches or stages was established about 1830, enabling merchants to reach Baltimore by horseback in six days, although their loaded wagons required fifteen days or more. The town especially felt the influence of the wide Northwestern turnpike which was completed about 1836 and macadamized from Tygart's Valley river to Parkersburg in 1848, increasing facilities for travel and news. By 1845 tri-weekly stages connected on the west with Parkersburg and on the east with Romney and thence with Green Springs on the Baltimore and Ohio railroad.

With the increase in the number of settlers and the development of settlements around the head waters of West Fork the inconveniences of communication with the county seat at Clarksburg found expression in the demand for the formation of a new county. This demand was satisfied in 1816 by an act of the assembly which created Lewis and provided for the location of a permanent county seat by five commissioners. Fleshersville, which was chosen, was incorporated in 1818 as a town under the name of Preston, changed in 1819 to Fleshersville, and later to Weston which has since borne the honor with no serious opposition. In the following spring the first survey of the West Fork and the Monongahela, with a view to the improvement of navigation, was begun just below the Weston court house.

Gradually the earlier log houses were succeeded by better struc-

tures expressing refinement, social tastes and prosperity. The early settlements of the northern and eastern parts of the county were supplied with lumber from choice yellow poplars and black walnuts prepared by water power saw mills located along the neighboring streams. Trees which were too large to be easily sawed were split into fence rails or burned in the clearings. Although in 1843 portions of Lewis were detached to contribute to the formation of Barbour and Ritchie counties, the population of the county steadily increased—about 2,000 each decade—until 1850, after which it was decreased by loss of territory occasioned by the formation of Upshur county in 1851. By 1845 Weston contained about sixty dwellings.

The large development and aspirations of the people of Lewis at the middle of the century found expression in many ways—the most prominent of which probably were the Weston and Fairmont turnpike, the Weston and Gauley Bridge turnpike, and the Weston and West Union turnpike. A branch of the Exchange Bank of Virginia was established in 1853.

On the eve of the civil war Weston secured the location of the hospital for the insane—the first and only state institution which was located in the transmontane territory later included in West Virginia.

On the upper Tygart's Valley, around the site of Philippi, the early scattered settlements were connected by "blazed" trails, many of which were distinguished by the kind of tree blazed in order to avoid bewilderment or danger of becoming lost at trail crossings. As early as 1788 the trail from Clarksburg to Winchester, the east and west highway through the territory included in Barbour and Tucker, crossing the Valley river a mile below Philippi and Cheat at St. George, was mentioned in the records as the "state road"—although it was still only the "Pringle Packroad." The Beverly trail branched off a mile above the mouth of Hacker's creek, and passed via Sugar creek and the site of Belington. With the establishment of Booth's ferry, the road from Clarksburg to the Valley river was widened for wagons and steps were taken to open the road toward Beverly via Sugar creek. By 1803 there was a wagon road constructed on the east side of the river which was later extended to Beverly. The first wagon which appeared in the county was brought in pieces over the mountain to Cheat in 1783 via North Branch, Lead Mine run and Horse Shoe run before trails had been widened for wagons.

The early economic life was largely confined to the problem of mere subsistence. Ginseng, however, was exported as early as 1789.

A tan yard was located above Philippi in 1800 and the first mill at Philippi was erected in 1818.

In 1843 Barbour county was formed from Randolph, and parts of Harrison and Lewis, and the site for the court house promptly selected at Philippi (the old Booth's ferry of Randolph) which was then only a farm. Among the first acts of the court was one fixing the charges for taverns, which was re-enacted every subsequent year for over a decade. By 1845 the county was regarded as rather thickly settled at the heads of Simpson and Elk creeks, and on the Buckhannon and Tygart's Valley rivers. Philippi contained only about a dozen houses, but a basis for later development was believed to exist in neighboring deposits of excellent coal and iron.

Coincident with improved transportation facilities resulting from the completion of neighboring turnpikes—the earlier Northwestern, and the Staunton and Parkersburg turnpike completed via Buckhannon in 1847—various signs of improvement appeared. Instances of the introduction of improved machinery, occurring in 1840, became more common a decade later. Although the horse-power thresher began to appear perhaps as early as 1846, the first horse-power thresher and separator was not introduced until 1852. In 1848, in Cove district there was an attempt to develop the iron resources; and, in 1849, the product, after a haul of fifty miles on wagons, was transported to market by boats on the Monongahela. At the same time construction of local pikes was begun. In 1850, Luther Haymond of Clarksburg completed the survey for the Beverly and Fairmont pike, making changes of route above Belington and elsewhere which caused bitter controversies. In Barbour one of the first steam saw and grist mills was built at Peeltree about 1856 and continued to saw lumber for local use for thirty or forty years.

After the opening of the Baltimore and Ohio railroad the people from the northeastern part of Barbour found their most convenient shipping point at Thornton. From various points on the Tygart's Valley river, considerable timber was floated to Grafton. The Bank of Philippi, the first bank in Barbour, was established in 1855, and closed at the opening of the war. Its notes were bought by speculators even after the close of the war.

The first newspaper of the county was founded in 1857 and suspended publication in June, 1861.

At the outbreak of the war nearly all the county officers of Barbour sympathized with the secession movement of the South.

Along the Buckhannon river, in the earlier years of settlement, hunting, both of animals and of medicinal plants, was a necessary occupation which ceased as such only when the profits arising from it became less than the profits from other labor.

The earlier trails were gradually widened into roads to meet the increasing demands of the settlements—especially after the introduction of wagons. In 1814 the court of Randolph ordered a horseback or pack horse road from Beverly to Buckhannon which was later widened and graded and converted into a section of the Parkersburg and Staunton turnpike. In 1800 Jacob Lorentz, Abraham Post and Abraham Carper emigrated from the South Branch, cut an uneven wagon road along the Indian trail and brought the first road wagon to the region. In the same year goods were transported from Beverly to Buckhannon in a wagon. The second road wagon was brought to the county in 1810 by the New Englanders on their overland journey.

A mill built 1783 above the mouth of Fink's run near Buckhannon was the only mill in the Buckhannon valley for a score of years. A second mill in that region was built in 1821. Saw mills for domestic use were established on Spruce run in 1806, at Buckhannon and Sago in 1810 and at French creek (Meadville) in 1813.

Cattle, brought by the earliest settlers of 1770 and by almost all later settlers, were improved by a better breed brought by settlers from New England about 1810. Sheep were introduced from Hardy county and from New England at the same time. Sheep husbandry became an important industry—especially after the close of the hunters period along the frontier. Obstacles arising from the migratory habits of the sheep and the depredations of wolves and dogs were largely overcome with the development of the settlements. In the earlier days there were many and menacing disputes over ownership of hogs—a product which found a ready sale at Richmond, Winchester or Cumberland.

Spinning, knitting and weaving were common home industries. Every family contained its own tailor, usually a woman. At first the tanning of leather was a home process, and almost every family contained a cobbler. The conditions encouraged native mechanical genius. Salt, which in the earlier days was brought over the mountains on packhorses and sold at prices which made it too dear for extensive use, was obtained in the county by evaporation after 1839.

Jacob Lorentz, who established the first store in the limits of the county—and for a long time the only store in the entire surrounding region—, for many years brought his goods on packhorses from Rich-

mond, Parkersburg or Cumberland. A second store was opened near French creek in 1820. Towns emerged slowly. Buckhannon was established in 1816 on lands then in Harrison county.

Under the loose system of Virginia land warrants, which often applied to no particular spot and resulted in many conflicting claims and endless controversies, many New England settlers, who became tired of dilatory courts and adverse decisions, emigrated westward (largely to Illinois) about 1830. Many people who remained were compelled to repurchase their lands from rival claimants.

Industrial development and other improvements in the county were especially stimulated after 1848 by the construction of the Staunton and Parkersburg turnpike and the Clarksburg and Buckhannon turnpike, and especially in 1852 by the completion of the railroad to Grafton opening a market for logs rafted down the river.

The first attempt to establish Upshur county made in 1848, met considerable opposition especially at Weston which disliked the proposal to add to the new county a part of the territory of Lewis. The law, creating the new county from parts of Randolph, Barbour, and Lewis, was finally enacted in 1851. The town of Buckhannon was incorporated in 1852, and the first court house was completed in 1854.

By the census of 1860, Upshur had a population of 7,299 which was about 700 less than that of Lewis and almost 50 per cent greater than that of the neighboring mother county Randolph.

Early development in Randolph county was much retarded by lack of communication. The earliest roads were mere "bridle paths" between the several settlements. In 1787 the first court of the newly formed county provided for marking a way for a wagon road from Leading creek to Horse Shoe Bottom on Cheat (now in Tucker), but not until 1826 were wagons able to cross the mountains from the direction of South Branch. By 1800 a score of roads had been surveyed in Randolph county. By 1801 the court ordered a survey from the mouth of Black fork of Cheat to the head of North Branch—which, although it resulted in no road, was later followed by the West Virginia Central and Pittsburgh railroad from Fairfax to Parsons. In 1814 a pack horse road was ordered from Beverly to Buckhannon. In 1822 aid was voted to open a road from Beverly via Clarksburg to Sistersville. In 1824 the legislature authorized a "state road" from Staunton to the mouth of the Little Kanawha which was built via Beverly over the same general route followed by the Staunton and Parkersburg turnpike twenty years later. In 1826 Randolph cooperated with Monongalia in constructing a bridge across Sandy creek

which was their boundary until the creation of Marion county in 1842, after which it became successively the boundary between Randolph and Marion, then between Marion and Barbour (1843) and finally between Barbour and Taylor (1844). In 1832 steps were taken to raise money by lottery to build a road from Beverly to Morgantown.

Development, with few exceptions, was slow. The first saw mill at Mingo (upper end of the county) was built near Valley Head in 1822 and the wagon which hauled the irons for the mill was the first that crossed the mountains to Mingo. The first grist mill in the upper fifteen miles of the river was built about 1820 or 1822.

Outside the valleys of Tygart's river and Leading creek the territory of Randolph was occupied but slowly— and a century later much of the forest land remained undisturbed. Even after half a century few houses were built of sawed lumber. A saw mill introduced near Valley Head in 1822 was probably the only one in the county in 1835 and perhaps for several years later. Even in 1840 there were few settlements except along the Cheat and in the narrow bottoms of the larger creeks toward the northern end of the county. In 1853 there were large tracts entirely uninhabited and almost inaccessible.

Changes in markets and transportation are illustrated in the case of David Blackman who, being engaged in the mercantile business at Beverly from 1824 until the civil war, hauled his goods first from Baltimore, then from Winchester, then from Cumberland and later from Fetterman. The chief source of wealth in the county in the ante-bellum period was live stock—a product which exported itself to the eastern market.

The population of Beverly in 1845—three years before it was incorporated as the "Borough of Beverly"—was about 200. The population of the originally larger county which reached its highest point in 1840 (6,208) suffered a reduction from 5,243 in 1850 to 4,990 in 1860—due to the loss of territory to form Tucker county in 1856.

At the close of the Indian troubles the few people of the northern end of Randolph in scattered settlements along upper Cheat in the vicinity of Leading creek turned to the hard work of clearing small spaces on which they cultivated small crops of corn from which to make corn bread. During a part of the autumn they hunted deer and bear—and in the earliest years sometimes found buffaloes, which, however, were never as plentiful as in the region of Buckhannon, Clarksburg and farther west along the Ohio.

At an early date a sash mill was operated in the county by N. M.

Parsons and George M. Parsons. Among other later ones was that built on Cheat as early as 1830 by Arnold Bonnifield who operated it continually for thirty-five years. The first commercial demand for lumber outside the county was created by the construction of a bridge over Cheat at the crossing of the Northwestern pike, five or six miles above Rowlesburg. Much of the lumber used in the bridge was sawed by Bonnifield, hauled to the river and built into rude rafts which were driven by the current to their destination.

Beginning about 1852 and continuing long after the civil war, the main Cheat river for about twenty or twenty-five miles above the railroad was somewhat developed by an enterprising company which sought ship-timber for the English market and had mill-works located at Rowlesburg. After 1860 portable and stationary steam saw mills rapidly increased, replacing the old water-power mills by which seven-eighths of the timber both for home and foreign use had been manufactured.

As late as 1840 there were very few settlers except along the river and in the narrow bottoms of the larger creeks. The region called "Canada" and the land of Canaan—a high basin surrounded by mountains, the Backbone on the west and the Allegheny on the east—was an uninhabited wilderness. From the head of Black Fork to Fairfax stone was an unbroken forest of trees which stood so thick that their branches interlocked for miles completely shutting out the sunlight from the soil below. Bears and panthers travelled through tunnels which they had broken through the thickets in all directions. Although the wilderness of the mountains was largely unbroken, occasionally among the hills appeared the cabin of a settler who was opening a farm. In 1836 settlement was begun about the headwaters of Clover run. The first cabin was without door, floor or chimney but it attracted other settlers who obtained lands and by 1840 the neighborhood consisted of five families (including about thirty children) who had begun the earnest work of breaking up the thick forests and its dens of panthers and bears, and had also built a round-poled, floorless school house in which their children might be able to obtain some rudiments of an education. Canaan valley and the surrounding plateau country remained practically undisturbed until the forest fire of 1865 which was soon followed by other "burnings" started by hunters.

The people of the northern end of Randolph, long dissatisfied with the inconveniences of the journey to the county seat at Beverly over bad roads between settlements separated by large tracts of woods, repeatedly agitated the subject of a new county even before the revival

of the activity resulting from the new industrial opportunities opened to them by the construction of the railroad through the neighboring-woods on the north at the middle of the century. The decisive step was finally taken in the winter of 1854 by a meeting at the residence of Enoch Minear in the old stone house at St. George—which was then called Westernford. Through the influence of strong petitions and strong lobbying, supplemented by the enthusiastic assistance of Judge John Brannon of Lewis county in the legislature, early in 1856 the new county of Tucker was created with the seat of justice at St. George—which remained the county seat until long after the war. The size of the county was later increased by the addition of a strip of territory taken from Barbour. The total population in 1860 was only 1,428.

When Tucker was created, a few of its citizens foresaw a future of greater industrial prosperity. Abe Bonnifield, viewing the principal ridge of Backbone mountain along the side of which the sugar maples belonging to W. R. Parsons were falling beneath the axes of his slaves, saw the promise of rich grazing plantations. Considering the unoccupied regions of the land of Canaan which had recently come into the market, he expected to see a new tide of emigration. Knowing that coal had been discovered about 1835 on the sugar lands, and about 1855 on the other side of the mountain, he had confidence that the railroad projected in 1856 up the North Branch from Piedmont on the Baltimore and Ohio would soon be built, and that its terminus would be in the coal lands of Tucker. The realization of his dreams which came in surplus measure thirty years later, was doubtless postponed in part by the war of secession in which he was a participant in the Confederate service.

5. ALONG THE OHIO.

At Wheeling, which early became an important outfitting point for flatboat traffic, the first post office was established in 1794. By 1795 mail boats carried mail between Wheeling and Cincinnati (by four relays) in six days downstream, and twelve days upstream. After the Indian treaty of 1795, additional facilities were secured by establishing land routes. In 1801 the road connecting it with Pennsylvania and Morgantown on the Monongahela were repaired. Its first physician arrived in 1803. Its first newspaper (The *Repository*) was issued as early as 1807. From 1818 it became the principal town of the panhandle. With the approaching completion of the National road to the Ohio, business men from other places arrived and began

to promote new enterprises which received little attention from the older inhabitants whose money was invested in lands. The first manufacture of window glass began in 1820. The first iron mill was erected in 1834. The first medical society was organized in 1835, and the first hospital was established in 1850.

The development of Wheeling as a municipality began in January, 1806, when it was incorporated as a village. In 1810 it had 914 inhabitants. By the building of the Cumberland road to the Ohio river in 1818, and the subsequent extension through the state of Ohio, the town received additional prominence as an avenue and distributing point for passengers and freight east and west, until the turnpike was superseded by railroads. The population increased rapidly. In 1836 the town was incorporated as a city and the waterworks were built. In 1847 telegraphic communication was obtained by a tap-wire from the main line under construction along the opposite bank of the river. In the same year the project of building a bridge over the Ohio river at Wheeling, which had been previously advocated unsuccessfully by several western states as a national measure before Congress, was revived by the people of Wheeling as a private enterprise, and under a charter from the state of Virginia a suspension bridge with a clear span of 1,010 feet was in 1849 built over the main channel, and connected with the Ohio shore by a pier bridge previously built—the two structures being subsequently protected by an act of Congress declaring them post-roads. The suspension span was blown down in 1854, and was rebuilt during the same year.

The corner stone of Wheeling's prosperity to 1860 was the Ohio. In 1830 the city was made a port of delivery, and boatbuilding which had been carried on to some extent previously became one of its important industries. Its position as the largest town in western Virginia was also influenced by the vast number of emigrants who passing through it en route to the middle and farther west, increased its trade and gave it an atmosphere of business. Its population increased steadily from 914 in 1810 to 1,567 in 1820, 5,221 in 1830 and 7,885 in 1840. Its connection with the East was facilitated by the completion of the Baltimore and Ohio to Cumberland, enabling it to secure goods from Baltimore in seven days. From 1849 to 1879, ninety-nine steamboats, varying from *651* to *14* tons burden were launched from Wheeling boatyards. The quality, abundance, and location of the coal strata adjacent to Wheeling induced the establishment of other manufactures, notably of glass and iron, at an early date; and wagons, furniture and other similar products, were turned

out in considerable quantities for western and southern markets. With the establishment of such manufacturers came a further proportionate increase of the population of the city, besides a very considerable increase in its suburban towns and villages. The growth was assisted largely by the opening of the Baltimore and Ohio railway to Wheeling in 1853, and the completion of its branch connection with the West, Northwest and South. It was also aided by the completion of the Cleveland and Pittsburg railroad and other branches of the Pennsylvania system, and of minor roads, opening up communication with adjacent territory. In 1848, the gas works, now owned by the city, were begun by a private corporation. In 1851-52 the building known as Washington Hall, which was subsequently burnt and replaced by the present structure, was erected; and in 1859 the custom-house, post-office, and the United States court building, were constructed.

Development in Brooke county was also rapid. At an early day Wellsburg was the rival of Wheeling for travel between East and West. Until 1818 she was one of the most noted shipping points on the upper Ohio—even exceeding Wheeling in exports. Her first bank began operations in 1813 but was closed in 1815. Though she lost by the decision which made Wheeling the terminus of the National road, she renewed her rivalry with desperate zeal in 1825 when the question of repairs on the road revived her hope of securing a more northern route. To divert travel from the route via Wheeling, she projected the Wellsburg and Washington turnpike which was soon abandoned in despair and allowed to languish for many years. In 1832 she obtained the establishment of a branch of the Northwestern Bank of Virginia. In 1834 she was disappointed in her expectation to become a prominent point on a railway between Washington, Pennsylvania and the Ohio canal at Stillwater. The Bethany turnpike, connecting with a turnpike to Washington, was surveyed and graded in 1850 and macadamized gradually thereafter.

The early settlers depended largely upon the New Orleans market, but trading by packhorse over the mountains continued until the opening of the Mississippi was assured.

The distilling and milling business was begun in 1807 and flourished for many years. Distilleries almost succumbed by 1836 and ceased to operate by 1845. The flouring business also declined with the deterioration of the land and the opening of new areas elsewhere. Glass works were erected in 1813 and cotton manufacture became prominent in 1829. Boat building also thrived for awhile.

Courtesy of W. Va. Geological Survey.

WELLSBURG-BETHANY TURNPIKE TUNNELL.
(With "Morgantown" Sandstone above.)

Bethany college was founded in 1841. The town of Bethany was laid out in 1847 by Alexander Campbell who in 1827 had secured the establishment of a post-office at his residence there, by agreeing to carry the mail free twice a week between his house and West Liberty.

In the territory included in Hancock county, one of the earliest industries was the manufacture of iron at a furnace which was erected on King's creek between 1790 and 1800 and continued in operation for several years.

The formation of Hancock county in 1848 was the sequence of an earlier plan to move the county seat of Brooke from Wellsburg to the more central point at Holliday's Cove. Fearful of losing the court house the people near Wellsburg voted with the people farther north for a division of the older county.

New Cumberland was laid out in 1839 and enlarged in 1848 and 1850. It obtained a post office in 1844. At the formation of Hancock it was selected as the county seat by popular election, but the county court which sat at New Manchester (now Fairview) refused to remove the records until after a second election (1850). On a third vote to settle the question, New Cumberland lost by one vote (1852) resulting in the return of the records to New Manchester and the settlement of the county seat question for a quarter of a century.

Along the Ohio below Wheeling, development was less rapid. On the site of Mr. Tomlinson's earlier town which had decayed after its failure in the competition with Wheeling for the county seat, Moundsville was laid off in 1831 and established as a town by act of 1832. New Martinsville, at which a hotel was erected in 1807, was established as a town in 1838 and became the county seat of the new county of Wetzel at its creation in 1848. Its earliest church building was erected by the Methodists in 1854 under the pastorate of J. J. Dolliver. Sistersville, through its advantages as a convenient boat landing assumed some importance as a promising town by the middle of the century. The Sistersville and Salem turnpike, begun in 1840, was completed in 1848.

At the mouth of Middle Island creek, St. Marys was founded in 1849 by Alexander H. Creel who came from eastern Virginia in 1834. Near its site the earliest settlement was probably made before 1797. Several settlements were made along the Middle Island creek early in the nineteenth century. Mr. Creel in 1834 purchased land on the site of the future St. Marys, but in 1837 he located at the mouth of Green's run, a mile below, and established a village which he named Vaucluse and from which he obtained interior communi-

cation by a road called the Ellenboro Pike, intersecting the Northwestern turnpike at the site of the present post office of Pike. By its terminal facilities, Vaucluse became a central point for the distribution of goods on both sides of the river, and for awhile seriously affected the monopoly of trade previously enjoyed by Parkersburg—even causing several Parkersburg merchants to establish "wholesale houses" there. Finding the site too contracted for a town, Mr. Creel in 1847 returned to the site of St. Mary's and in 1849 made a lot survey of the proposed town at the same time giving one acre to the future county of Pleasants on which to erect a court house. To secure connections with the interior a road was constructed to join the Vaucluse pike at the top of the hill. The St. Mary's pike to Parkersburg was built in 1848-50. The population increased rapidly and business became active—stimulated especially by a wagon trade with interior points, including Clarksburg which shipped goods by flat boat or steamer to pioneer settlements farther west. This trade declined after the construction of the railway to Parkersburg, which offered special inducements for the abandonment of the Middle Island route.

At the mouth of the Little Kanawha industrial and social development was retarded for a generation. The first licensed tavern or ordinary was kept by Hugh Phelps on the south side in 1789. For some time, settlers at the mouth and along the river above received their mail at Marietta. By 1818, the steamboat began to create a new era for the pioneer. The population at Parkersburg was scarcely 200 (some say about 400) by 1832. In 1833, the first newspaper was established. As late as 1830 to 1835 there were few carriages in the region. The larger development of the town dates from the completion of the Northwestern turnpike (in 1837) and the Staunton turnpike (in 1843), both bringing business and traffic which increased the value of steamboat connection. By 1844 the population was about 1400. In 1839 the Northwestern Bank of Virginia was established. The new stimulus received from the completion of railway connection with the East in 1857 was re-enforced by the oil development after 1859.

In the interior, east of Parkersburg, Harrisville was located and laid out in 1822 in a sparsely settled region. It became a post office in 1830, and the county seat of the new county of Ritchie in 1843. Pennsboro, the oldest post office in Ritchie came into existence about 1820. Smithfield was established as a town in 1842.

Below Parkersburg at Belleville, which Mr. Avery had established

on his tract fronting five miles on the river, the expectations of the founder were never realized. In 1806 Mr. Avery had lost heavily from a fire, started by incendiaries, which destroyed his grain-filled barn, and his grist and saw mill. In 1807, after failing in the shipbuilding business in which he had largely invested, he was confined in the Wood county jail for debt.

At the same time development on the Ohio below Belleville was prevented by the high price demanded for the land by the heirs of Washington whose will had admonished the executors not to dispose of it too cheaply and had suggested a price of $10.00 per acre. At the site of Ravenswood on which already stood a blacksmith shop, a ferry was established across the Ohio in 1831, the first stock of goods for a store arrived in 1832 and the nucleus of the town was laid out in 1836. The first church building was erected in 1837. The first resident physician arrived in 1841. In the decade after 1840, the chief industries were lumber sawing and boat building. In 1849 the town secured a post office and in 1860 it had a population of 250 or 300 who became very nearly divided on the question of the war. During the war the town was almost deserted. Its subsequent growth began about 1870.

In the northern part of Mason county within the large bend of the Ohio, Mason City was laid out opposite Pomeroy in 1852 by coal operators who found a market for their product principally at Cincinnati and Baton Rouge. These operators were later succeeded by a company which long after the war used all its own coal for the manufacture of salt, which was sold to the Ohio Salt company of Pomeroy. The town was incorporated in 1856, coincident with the opening of its first salt well and salt furnace by the Mason City Salt company, which later also opened new coal mines which were operated until 1882. At the same time its industrial activity was increased by the establishment of its first saw mill resulting soon thereafter in the opening of a boat yard.

Although even early in 1774, the mouth of the Great Kanawha was a resting place for surveyers and their attendants and a rendezvous for explorers and restless pioneers, the real pioneers of Mason county were the occupants of Fort Randolph and the settlers who, after the danger from the Indians had subsided, established log-cabin homes in the unbroken wilderness along the two rivers. At Point Pleasant—although Boone lived there in 1786 and ferries were established over both rivers by Thomas Lewis in 1791, and although a few other cabins began to appear around the old fort by 1794 and an inn was

opened in 1797—the growth of community life was long retarded by the size and price of the tracts held by absentee landlords, and by the difficulty of establishing titles to lands while at the same time on the Ohio side of the river lands could be bought at a reasonable price and in small tracts suitable for farms for real settlers.

In 1806 Thomas Ashe in his description said that the town contained about forty houses frame and log with an aspect indicating no prospective increase. "The few disconsolate inhabitants who go up and down, or lie under the trees," said he, "have a dejected appearance and exhibit the ravage of disease in every feature and the tremor of ague in every step. Their motive for settling the town must have been to catch what they can from persons descending the river and from people emigrating from the southwestern part of Virginia, with a view to settling lower down the river, and who must make Point Pleasant a place of deposit and embarkation. Were it not for the unhealthiness of the town, it would not be unreasonable to presume that this circumstance would render it in time a place of considerable note."

In 1807 Cuming saw only "Twenty-one indifferent houses including a court house of square logs."

In 1820 The *Navigator* described it as a village of "fifteen or twenty families, a log court house, log jail and (as usual in the Virginia towns) a pillory and a whipping post."

Henry Clay who later was on a steamer which stopped at the town compared it to a "beautiful woman clothed in rags."

The first practising physician in this region was Dr. Jesse Bennett (one of the jurors in the trial of Burr) whose practice extended from Point Pleasant to Marietta and from Lewisburg to Chillicothe. Among the earliest industrial establishments were distilleries and tanneries. A new court house and jail were completed in 1826. The town was incorporated in 1833 and again in 1840 and soon thereafter coincident with the extermination of wolves in the neighboring region its business was increased by the opening of a ship yard. The first bank, a branch of the Merchants and Mechanics bank of Wheeling, was opened in 1854. The Charleston and Point Pleasant turnpike company, organized in 1837, constructed a road which after the destruction of its principal bridges by the unusual flood of 1847 became impassable for wheeled vehicles and useless except for neighborhood travel.

Below the mouth of the Great Kanawha, in Cabell county, development was early influenced by the opening of the state road through Teay's valley and later by the construction of the Kanawha turnpike which connected with Ohio steamer lines at Guyandotte. Guyandotte after a steady growth was incorporated and extended in 1849, and its prospects were brightened by the incorporation of the Guyandotte Navigation company which built locks and dams to secure navigation for the transportation of timber at all seasons of the year.

The Cabell and Logan Coal company was incorporated in 1852, the Bank of Guyandotte in 1854, and the Guyandotte River Railroad in 1858.

6. ALONG THE GREAT KANAWHA.

Up the Kanawha from Mason, in the territory which was included in Putnam at its formation in 1848, the oldest town was Buffalo, laid out in 1834 (incorporated in 1837) and named from the earliest post office which was removed to it from the mouth of Big Buffalo creek four miles above. At Winfield, on the site of a ferry which had been established in 1818, the first hotel was opened in 1850 and the first church built in 1856.

Farther up the Kanawha above the head of Teay's valley, earlier development was favored both by location on an earlier route of travel and by various local influences—especially by the salt industry which became prominent after 1808. At Coalsmouth, however, there was little industrial development for a generation. In 1816 Colonel Philip Thompson of Culpepper, Virginia arrived at Coalsmouth with his family and purchased a part of the George Washington survey on the Kanawha at that point. Here he built his home and was later followed by others from eastern Virginia. In 1834, three years after the place had become a "stage stand," he laid off part of his farm into town lots and named the place Philippi, which after his death in 1837 continued to be known as Coalsmouth, (the name of the post-office). In 1856, Samuel Benedict of Pennsylvania laid out adjoining lots and called the town Kanawha City—a name by which it was known until the construction of the Chesapeake and Ohio furnished the impetus for an additional lot sale. A general store and merchant mill, established about 1820 a mile below the mouth of Coal, was later moved to Coalsmouth and proved a profitable enterprise. After the improvements were made up Coal at Peytonia, the work of the mill greatly increased. Another early industry was the manufacture of lumber by whipsaw, and the construction of flatboats for the transportation of salt from the Kanawha salines to lower river markets. About 1858 the first saw mill was built at the mouth of Coal.

Charleston had a steady growth, although slow in the earlier years. Its first awakening was marked by the authorization of the first ferry across the Kanawha and the Elk in 1794 and the establishment of

the first post office in 1801.* Its earlier growth was greatly stimulated by the development of the neighboring salt works at the Kanawha Salines after 1808. Its first tub mill was built below the mouth of Elk in 1805, followed by later saw mills erected on Two Mile creek of Elk between 1815 and 1820. Its first steam flour mill was erected by David and Daniel Ruffner in 1832. The first clock and watch maker came in 1808 and the first regular merchants began business in 1813. There were several tailors by 1822. The first resident physician arrived in 1811, but the first drug store waited until 1825. The first local newspapers were the Spectator established in 1818 or 1819, the Kanawha Patriot in 1819, the "Western Courier" in 1820 and the Western Register in 1829. The erratic lawyer who founded the Spectator soon became principal of Mercer Academy which was founded in 1818 and sustained a "Law Department" by 1823. A library was opened by 1823. A Sunday school, although strongly opposed, was opened in 1823.

A new era of growth was stimulated by the opening of steam navigation in 1820—resulting in steamboat connection with Cincinnati about 1823—and especially by the opening of the Kanawha turnpike and the increasing traffic which followed. The first bank, a branch of the Bank of Virginia, was established in 1832. The first church building was that of the Presbyterians erected in 1828. It was followed by that of the Methodists erected in 1833 and that of the Episcopalians erected in 1834. The Kanawha telegraph company (organized 1849) constructed a telegraph from Kanawha Salines via Charleston and Point Pleasant to Gallipolis in 1852. A wire suspension bridge over the Elk was erected in 1852.

In 1853-57, the salt industry on the Kanawha was impoverished to satisfy the demands of the salt men of Meigs county, Ohio, and Mason county, Virginia, who formed the Ohio River Salt company which was not dissolved until 1872. As the manufacture of salt became a "vanishing industry," the mining of cannel coal arose into prominence largely through the investment of foreign capital which was attracted by the reports of the exploration of Kanawha coal deposits by Professor W. B. Rogers of the University of Virginia in 1839 and to 1841. Several coal companies, organized between 1849 and 1856 to operate on the Kanawha, Elk and Coal rivers, were the forerunners of business expansion and increasing prosperity. In 1857

*Charleston was on the mail route extending from Lewisburg to Scioto Salt Works in 1804 and from Lewisburg to Chillicothe for several years after 1808. About 1811 a mail route was established between Kanawha Court House and Gallipolis, and in 1814 there was a route from Boyers to Catlettsburg.

the Kanawha Cannel Coal Mining and Manufacturing company erected at Charleston buildings for use in the manufacture of cannel coal oil. In 1858, the Corwin Cannel Coal company erected buildings at Mill creek seven miles up Elk. All the various companies advertised for all classes of laborers in 1859 and were in a prosperous condition in 1860.

Along the upper Kanawha and lower New, Fayette county was created in 1831, from Kanawha, Greenbrier, Nicholas and Logan. The county seat which at first was located at New Haven (in Mountain Cove district) was removed in 1837 to the site of Fayetteville (then called Vandalia) where court was held in the house (or tavern) of Abraham Vandall until public buildings could be completed. The vote by which Vandalia won against New Haven in the election contest was obtained by strategy. According to Colonel G. W. Imboden on the authority of his father-in-law (Colonel William Tyree) enough votes (of qualified free holders) to carry the election were secured by Hiram Hall, the first county clerk, by a liberal distribution of one-acre tracts of land with no specified boundaries. Shortly before the war, the history of Montgomery began with the arrival of boats from Cincinnati and other points on the Ohio to unload goods at Montgomery Landing which was then the distributing point for merchants in Wyoming, Mercer, Raleigh, McDowell, Nicholas and Fayette counties. From it they also shipped tobacco, hides, wool and other products. Oak Hill, near which Peter Bowyer operated a water-power mill as early as 1820, received its name later from the earliest postoffice established at Hill Top on the mail route from Fayetteville to Raleigh Court House (now Beckley). On the site of Glen Jean, a water-power mill was operated as early as 1850, and a post office was established soon after 1854.

7. INTERIOR SOUTH OF THE GREAT KANAWHA.

In the interior south of the Kanawha, development was usually long retarded. On the Madison map of Virginia of 1807 corrected to 1818 no towns are indicated in any part of the interior region and only one public road is represented—a road from the Kanawha via Loup's creek and upper Piney to Pack's Ford at the mouth of the Bluestone, and beyond through Monroe.

In the original county of Logan, formed in 1824 from Giles, Kanawha, Cabell and Tazewell, the county seat was located at Lawnsville or Logan Court House which was laid off in 1827. It received its earliest mails by horse over a post-road from Charleston. About

1850 it obtained better communication with Charleston by a state road through Boone which for many years was travelled by long trains of wagons from the interior.

Boone was formed in 1847 from Kanawha, Cabell and Logan. The county seat was at first located at the mouth of Spruce Fork which was unsatisfactory to the people. By an election authorized by legislative act of 1848 to settle the question, the location was changed to a point near the mouth of Turkey creek. The earliest road in the territory included in the county was a pack horse road via Marmet to Malden and Charleston at which the early settlers found a market for ginseng, venison, and bear hams. The first post offices in the county were established at Ballardsville and Madison. The largest industrial stimulus after the opening of the state road from Logan to Charleston was the work of the Peytonia Cannel Coal company which in 1854 placed locks and dams in the Coal river and erected an extension mining plant at Peytonia.

Raleigh county was formed from Fayette in 1850. Beckleyville (now Beckley), incorporated in 1850 coincident with its selection as the county seat, received its early growth largely through the activities of General Alfred Beckley who in 1836 married Miss Amelia Neville Craig of Pittsburg, resigned his commission as first lieutenant in the army, and removed to Fayette county to improve a body of unsettled lands (now in Raleigh) for his widowed mother and himself. Largely through Beckley's influence, the Giles, Fayette and Kanawha turnpike, authorized by acts of 1837 and 1839, was constructed from Giles Court House, via Red Sulphur, Indian creek, the Bluestone to its mouth, Flat Top mountain, Beaver creek, Beckley's, Loup creek and Fayette Court House to the Kanawha.

Wyoming county was formed in 1850 from Logan. McDowell was formed in 1858 from Tazewell, by a legislative act which declared that the county seat should be called Peerysville and appointed a committee to locate it. Both counties long remained largely isolated by lack of roads. In 1805, although it had become the abode of many of the "old families," the region along the Big Sandy and the Guyandotte was one of the wildest of western Virginia—a famous hunting ground for bears which fattened on the chestnuts and acorns and furnished many valuable glossy hides to decorate the soldiers of the two contending armies in Europe.

The pioneers along the Big Sandy and neighboring country often belonged to the best families of the older East, and some of them brought slaves with them as well as the household goods which they

carried on the backs of horses. For their products they found the earliest markets down the Ohio. For the up-river conveyance for their larger purchases, they used flat boats above the Sandy. They received their earliest mails from Catlettsburg, Kentucky. To make their earliest exchanges they went to the mouth of the river and continued to Burlington, Ohio (three miles below) or to Limestone. In 1815 or 1816, Joseph Ewing began store-keeping one-fourth mile above the mouth of Sandy in Virginia. Farther up the river, Frederick Moore established a store which from 1815 to 1834 secured the larger part of the Sandy trade. Coming west from Philadelphia with goods, he reached the forks of Sandy six years before Louisa became a town. He purchased tracts of land on both sides of the river. In 1818 he sent for his wife and children and established himself below the "forks" on the Virginia side.

Among the earlier industries in the Sandy valley was salt manufacture. As early as 1795 salt was made on lands belonging to Henry Clay on Middle Island creek in Floyd county, Kentucky, ten miles from Prestonburg (founded 1799). Near the mouth of Blain on the Virginia side of Sandy, considerable salt was made as early as 1813. Warfield on Tug received its earliest stimulus from salt works established before the war by Governor John B. Floyd and brothers of Tazewell county.

The new county of Wayne was formed from the southwestern part of Cabell in 1842, and the county seat was located at Trout's Hill (at Wayne). Ceredo was founded on the Ohio in 1857 by Eli Thayer who had dreams of founding a great manufacturing city there coincident with his activities to aid the emigration of anti-slavery men to Kansas. Fairview was incorporated in 1860.

IV. Historic Highways

Four prominent roads which crossed the territory of West Virginia at different points exerted a great influence on the development of the region through which they passed.

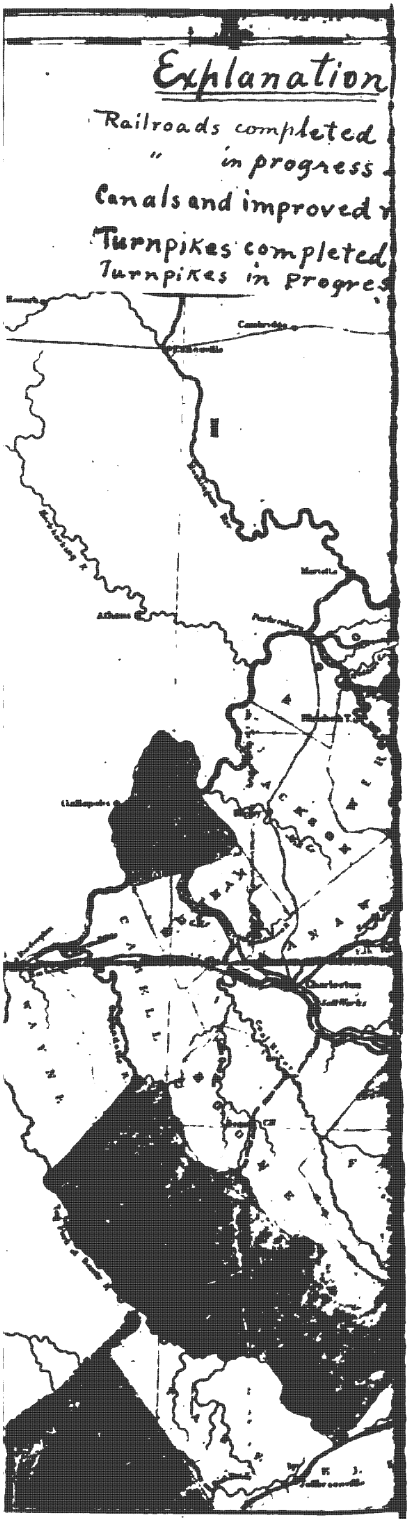
1. THE NATIONAL CUMBERLAND ROAD.

The earliest and most famous highway across the mountains was the Cumberland or National road, whose Ohio terminus was largely determined by the preference for Wheeling as a place of embarkation in dry seasons because of obstacles in the river between Wheeling and Steubenville. The road was projected largely through the influence of Gallatin and completed through the influence of Clay.

In 1803 at the admission of Ohio as a state, provision was made to connect it with seaboard by a road to be constructed by the United States from a fund arising from proceeds of sale of United States lands located within the boundaries of the new state. In 1805, commissioners appointed to examine routes finally selected one extending from Cumberland to Washington by the shortest portage from Atlantic navigation to Ohio river waters. After considerable delay, caused in part by insufficient funds from the land sales, Congress began to build the road in 1811; and, in response to the popular demand for its completion, first authorized advance treasury loans based upon expectations of future sales of land, and finally made additional appropriations openly with no pretense of a loan.

The road was well-built. In the middle of a cleared space of sixty feet in width, there was a leveled strip thirty feet wide, in the middle of which was the strip of road bed twenty feet wide and covered with small crushed stone eighteen inches deep in the center and sloping to a depth of twelve inches at the sides.

In 1815, before its completion to the Ohio, it was used for the "Great Western Mail" upon which prepayment of postage was required for the special service. The road was opened to Wheeling in 1818, although a section between Uniontown and Brownsville was not yet completed. Its immediate influence was felt, not only along its route across the northern panhandle, but also across the entire


Explanation
Railroads completed
" in progress
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Cambridge
Athens
Charleston

Courtesy of W. Va. Geological Survey.

BRIDGE ON NATIONAL PIKE NEAR ELM GROVE.

northern part of the state which was in neighboring proximity to the route of the road through western Maryland and southwestern Pennsylvania. Its influence was also felt in other parts of the state—especially along the Ohio which was regarded as its western complement. Besides its immediate influence upon points directly accessible to it, it exerted on the West and on the nation a general influence which was felt by the entire transmontane region.

The West, which (by the proof of a century) could not be held by waterways, was finally secured to the Union by the construction of this road and by the vast stream of colonists which poured over it into the Ohio valley. "Along the route the ringing of woodmen's axes, the clinking of surveyors' chains, the rattle of tavern signs and the rumble of stage coaches prepared the way for the 'star of empire.' The squalid cabins in which hunters had lived beside the more primitive thoroughfare were pressed into service as Taverns," and at convenient distances apart many new inns sprang up to supply the demand of increasing travel and traffic. "Indian fords, where the water had oft run red in border frays were spanned with solid bridges. Ancient towns which had been comparatively unknown to the world, but which were of sufficient commercial magnetism to attract the great road to them, became on the morrow cities of consequence in the world. As the century ran into its second and third decades, the Cumberland road received an increasing heterogeneous population. Wagons of all descriptions, from the small to the great 'mountain ships' which creaked down the mountain sides and groaned off in the setting sun, formed a marvelous *frieze* upon it. Fast expresses, too realistically, perhaps, called 'Shakeguts,' tore along through valley and hill with important messages of state.* Here, the broad highway was blocked with herds of cattle trudging eastward to the markets, or westward to the meadow lands beyond the mountains. Gay coaches of four to six horses, whose worthy drivers were known by name, even to statesmen who were often their passengers, rolled on to the hospitable taverns where the company reveled. All night, along the roadway, gypsy fires flickered in the darkness, where wandering minstrels and jugglers crept to show their art, while in the background crowded traders, hucksters, peddlers, soldiery, showmen, and beggers—all picturesque pilgrims on the nation's great highway."

In 1836 Colonel Reeside inaugurated lines of stages (with five-horse teams) which reduced the time of transit from Baltimore to

*According to the post office book, the President's message of December, 1829, reached Wheeling in 21½ hours, Pittsburg in 24 1-6 hours, Cincinnati in 50 hours and New Orleans in 4½ days.

Wheeling from eight to three days—or about forty-eight hours of actual travel on the road. Between these lines and those of Stockton there was strong opposition, resulting in frequent spirited races. Considerable obstruction to the stage-coaches resulted from the numerous drives of cattle, sheep and hogs, and from the old-fashioned Conestoga wagon in which most of the freight for the West was conveyed from Baltimore and Frederick to Wheeling. Three or four coaches were required to transport the continually increasing mails. A special wagon, designed by Postmaster-General Amos Kendall to carry the mails independent of passenger travel, was laid aside after a short trial. After the Baltimore and Ohio reached Cumberland, in 1842, the travel of the National road greatly increased. Competing lines were installed and often there were fifteen or twenty coaches entering and leaving Cumberland twice each day. There was a corresponding increase of traffic by wagons—forty often entered Wheeling in a day. In 1853, when the Baltimore and Ohio reached the Ohio, the son of the man who started the first line of coaches across the Alleghenies with the daily mail carried the last mail from the East by coach into Wheeling.

2. JAMES RIVER AND KANAWHA TURNPIKE.

South of Pennsylvania, after the Potomac-Wills creek route and the route through Cumberland Gap by the Wilderness road, the James River-Kanawha route was next in importance as an avenue of migration and travel across the great mountain barrier formed by the Blue Ridge and Allegheny mountains. An early writer who traveled over the route to the Ohio pronounced it "one of the principal chains destined by nature to bind together the eastern and western portions of this great republic." To connect and improve these waters and provide better facilities for travel and traffic between East and West along this route was one of the earliest intra-state public enterprises presented for the consideration of the government of Virginia after the close of the Revolution. The subject was a favorite one with Washington who in 1784 first brought it to the attention of the legislature, which promptly passed an act incorporating the James River company, and in 1785 authorized the construction of the "state road" (for wagons) which was completed to the navigable waters of the Kanawha by 1790 and opened to the Ohio by 1800.

In 1781 an effort of the Greenbrier people to obtain from the legislature power to extend a wagon road westward from Warm Springs to the court house at Lewisburg (The "Savanna") as a convenience

for the importation of salt and the exportation of hemp, though it met with some opposition, finally secured for the county court authority to levy money by which the road was opened in 1782. (At the same time a similar road was opened from Warm Springs to Sweet Springs). In October 1785 a new act authorized the opening of bids for opening within two years a wagon road at least 30 feet wide from Lewisburg to the lower falls of the Kanawha. This road, probably with a width considerably less than the specifications, was constructed in 1786. It completed what was known in the statutes as early as 1790 as the "Old State Road," the first communication by wagon from the East to the navigable waters of the Kanawha. In 1791 the terminal point of overland travel westward to Kentucky and other points on the Ohio was on the Great Kanawha twenty miles above the mouth of Elk at Kelly's creek. Here the travelers secured bateaux or small flat-boats built to carry them by water for the remainder of their journey. In 1796, and again in 1803, appropriations were made for the repair of this road from Lewisburg to the Kanawha. In 1787 a new act authorized the construction of a wagon road from Kanawha Falls to Lexington, Kentucky. This road probably opened as early as 1800, was completed to the Ohio under authority of the county courts of Kanawha which as early as 1802 provided for surveys from which some kind of a road was constructed by 1804. In 1791, Thomas Lewis established a ferry at Point Pleasant across both the Kanawha and the Ohio. A ferry was established at Charleston in 1794, and another one in 1809. Stephen Teays, who settled at Coalsmouth in 1800, established a ferry and kept an inn for the travel between that point and the Ohio at Gallipolis and Point Pleasant. A post office was established at Kanawha C. H., in 1801. There was a fortnightly mail brought from Lewisburg on horseback. Mails were carried from Lewisburg to Scioto Salt works as early as 1804, and from Lewisburg to Chillicothe by 1807. By 1808 many drovers from Ohio and Kentucky passed over the Kanawha route to find a market for hogs and other live stock. Lewis Summers recorded that the drovers and travellers used nearly all the surplus grain along the route and that many sheep and hogs were destroyed by wolves and bears.

By act of February 1, 1809, tolls were authorized. Greenbrier county was authorized to erect on the state road two toll gates one of which near the ferry on New river; and Kanawha county was authorized to erect another on the road within her limits. Net proceeds of all tolls were applied to the maintenance of the road. An attempt was

made to fix tolls on an equitable basis according to damage done to the road. The following rates were established:

Wagon, team and driver	25 cents
Four-wheeled riding carriage	20 cents
Cart or two-wheeled riding carriage	12½ cents
Man and horse	6¼ cents
Cattle per head	¼ cent
Sheep or hogs, per score	3 cents.

In 1814 the chief route of those going westward from southern and middle counties of Virginia was via Lewisburg and across New river at Bowyer's ferry, through "Vandalia" (now Fayetteville), thence over Cotton Hill to the Great Falls of the Kanawha, thence continuing along the south side of the Kanawha. The road from the salt works east was in a "terrible condition." Cabell county which was formed in 1809 promptly supplied the pioneer demand for roads. By 1814, roads were opened to the falls of Guyandotte, to Big Sandy, to the Little Guyandotte, up Seven Mile, up Twelve Pole, up Four Pole and to other points of the county. In January, 1817, the legislature authorized the construction of a road from Montgomery's Ferry (now Montgomery) via Gauley river near its mouth to intersect the state road between Fleshman's Plantation and the top of Sewells mountain. At a very early date (by 1818 perhaps by 1807), long before the appearance of any towns in the interior south of the Kanawha, there was a public road from the Kanawha via Loup's creek and Upper Piney to Pack's Ford at the mouth of the Bluestone.

Among the prime factors which urged upon the legislature the needs of road improvement was the salt industry in the Kanawha valley which was restricted in its operations and suffered considerable loss through lack of proper facilities for transportation. In December, 1814, the construction of a more permanent road was urged and attention directed to the advantages in suitable road materials along the route. In 1815-16, with a view to the improvement of the communication between the James and the Kanawha, the Virginia assembly asked the aid of the federal government.

By act of February 17, 1820, the legislature secured a modification of the charter of the James river company that would authorize it also "to make a convenient road by the most practicable route from the James to the Great Falls of the Kanawha, and to improve the latter from the falls to the Ohio. For superintending these works the general assembly appointed by joint ballot nine commissioners, a majority of whom should decide all questions. By act of February 28, 1821, the number of commissioners was reduced to five and the

company was empowered to graduate the tolls on salt from one to two cents according to circumstances.

In 1821 the route of the new Kanawha road was located westward thru Greenbrier and beyond. The right side of both the New and the Kanawha was chosen because that route required fewer bridges and furnished better grade at less cost. A year later, the bridges between Lewisburg and Gauley were about completed. The covered bridges over the Greenbrier and the Gauley cost $18,000 each. In 1822 the company finding it difficult to procure "labor of proper kind" were forced to consider whether it could purchase slaves to complete the work.

By 1824 the road was completed between Lewisburg and the falls with an extension partly constructed from the falls to Montgomery's Ferry, and was much used by wagons transporting salt to Greenbrier, which thereby promised to become the main source of supply for Monroe and Pocahontas and for part of Nicholas. Salt which cost twenty cents per bushel at the works was conveyed to Lewisburg for twenty-five cents.

By 1824 the large quantities of salt hauled east drove out foreign salt which previously had been shipped from the seaboard, or reduced the price more than half. In order to extend the benefits of the trade the general assembly was asked to extend the road to the lower end of the salt works.

Three years later the road was completed only to a point about twenty-six miles above Charleston, and thence westward to the Big Sandy travel was only by horseback and light carriages. Much of the completed road had been badly damaged by heavy wagons and by hogs.

Early collection of tolls was attended with considerable difficulty. In 1825 the toll was five cents for each person, excepting those exempted by living within four miles of a gate and not traveling over four miles. Complaint was made that those who enjoyed free tolls assisted others to evade the law. The owner of the mill and blacksmith shop at Greenbrier Bridge obtained exemption from bridge tolls for his family, servants and customers. Tolls were much diminished by the action of the county court of Greenbrier in keeping open parts of the old Stone Road (the state road of 1786), which ran from Lewisburg to the falls parallel to the Kanawha turnpike and frequently crossed it. Some gates were so situated that roads could be made around them to avoid payment of tolls. A private road opened in order to turn Metzger's Toll Gate (fifty miles west of Lewisburg)

enabled the people to enjoy fifty miles of turnpike free from tolls. An act of February 28, 1829, exempted from tolls persons going to mill or returning from mill. The destruction of Gauley bridge by fire on July 11, 1826 by persons interested in the ferry at that point necessitated the employment of a ferryman who was paid one-third of the collections at that point. A new bridge, uncovered to reduce the danger from fire—a structure which stood until 1849—was completed in 1828. To keep the road in repair from Lewisburg west cost $1000 per year. The toll gatherers were paid 9 per cent of the collections.

At this period the people of the Kanawha route were temporarily excited over the prospects of railway communications with the east, but their hopes were soon reduced by the refusal of the Virginia Assembly to grant the request of the B. & O. for permission to construct its lines along the Shenandoah and over the divide to the headwaters of the Kanawha. At Richmond and in eastern Virginia the turnpike was regarded as an enterprise more desirable for the Kanawha because it was less liable to contribute to the commercial importance of Baltimore.

In 1828 the Board of Public Works in recommending the completion of the road to the Ohio to connect the East and the West and to stop the flow of population to the West, urged that it would be a better and shorter road to the West than any other road, not excepting the Cumberland road. An additional advantage was found in cheapness of provisions and labor.

The more direct Teay's valley route to the Ohio was chosen in preference to the longer route down the Kanawha to Point Pleasant which some desired. There was already a road on the south side of the Kanawha from the Falls to the Mud river. There were various reasons assigned for the location of the new road on the south side of the Kanawha from a point just above the mouth of the Gauley, but Charleston was selected as the place of crossing. The extension to the Big Sandy was probably influenced by the expectation encouraged by the assurance of Clay in 1826 that Kentucky would thereby be induced to make a good road from the Big Sandy to Lexington.

Work on the western section advancing eastward from the Big Sandy was begun in 1828 and an act for extension of the road to Big Sandy was passed early in 1829. A year later Crozet, the principal engineer, reported that the contractors had done practically nothing for repairs on the western section. In the most dangerous places the road was too narrow. In some places two carriages could hardly pass. Earth slips made some parts of the road dangerous. Contractors for

construction of the road west of Charleston in 1830 suffered from effects of the excessive rains and subsequent drouth, and from the advance of price of labor and provisions resulting largely from the extensive public works undertaken by Ohio. The toll bridge near the mouth of Coal river was not completed until near the close of 1832.

The first stage line was established between Charleston and Lewisburg by Caldwell and Surbough and was in operation by January, 1827, making one trip each week. The fare was $7.00 and preference was given to "those who first registered their names for seats." As soon as the road was extended to Big Sandy, the same weekly stage was run from Catlett's, Kentucky, to Lewisburg, where it connected with a stage line to Sutton. Although at first the stages ran via Pea Ridge (Teays Valley) directly to the mouth of the Big Sandy, Guyandotte promptly extended a road to Barboursville in order to profit by the travel, and thereby became the point of connection with a steamer owned by the stage company which made regular trips to Cincinnati twice each week. By 1835, with a population of only 300, Guyandotte was the most important point of steamboat embarkation and debarkation in western Virginia excepting Wheeling. Three miles below, however, she had a possible competitor for future supremacy: Brownsville (earlier incorporated as South Landing) which had been surveyed into lots by Crozet in 1832 and which still awaited the disposition of the proprietors of the land to put their lots on the market.

Since there was no competition of stage lines as on the National (Cumberland) road, stage fares changed little in the course of several decades. The schedule time for the entire trip was from Thursday at 1 p. m. to Satday evening. The fare from Big Sandy was 75 cents to Guyandotte, $4.50 to Charleston and $11.00 to Lewisburg. Each passenger was allowed 20 pounds of baggage free and for excess (carried at the option of the driver) was charged $4.00 per 100 pounds for each 100 miles. Passengers from the steamers at Big Sandy or Guyandotte, or from the connecting stage at Lewisburg, were given preference after those who registered for seats. In April 1829 the stage line from Guyandotte to Lewisburg was purchased by Porter and Beldon; and by the cllose of 1830 stages were running triweekly, and the company advertised to make the trips by daylight and to rest on Sunday—although, when the roads were in a bad condition and the stages were delayed, the passengers got little sleep. The earlier stage "stands" (relays where horses and drivers were changed) eastward from Charleston were Malone's Landing (opposite old Brownstown), Bowserman's (Hughs creek), Kanawha Falls, Mountain Cove (now Ansted), Lewis (Lookout), Richard Tyree's (at foot of Sewell mountain), Sewell creek (now Rainell), Meadow Bluff and Lewisburg.

The extension of the road to the "perfect wilderness" at the Kentucky line, by "foreign engineers," was criticised as an egregious blunder because it tended toward the "destruction of a flourishing Vir-

ginia town" (Guyandotte) and because its terminus was closed for a large part of the year by obstacles which Kentucky probably would not help to remove. This argument was used especially by those who advocated a branch road from Charleston down the Kanawha to Point Pleasant as a means to connect with Ohio roads.

Early in 1831, in accordance with the regulations of the post office department relating to mail stages, and to avoid delays of the mail, the stage drivers were prohibited from doing errands excepting the carrying of medicine. The mail contracts enabled the company to run daily stages. In establishing this line the speed was increased so that 75 to 80 miles were covered in a day—"nearly if not altogether accomplished in the daylight." For awhile Point Pleasant and Gallipolis mail was carried from Coalsmouth on horseback but later it was dispatched from Charleston by water. In July, 1831, the increase of travel eastward compelled the contractors to put on extra stages. The steamers connecting with the stage lines at Guyandotte and at Charleston were doing a good business. In 1832 the stage line carried mail daily, although under contract to do so only six days each week. Late in the year, however, the postmaster general established a daily mail from Richmond to Guyandotte. At the close of 1833 this was reduced to a tri-weekly mail. By 1837 the mail—carried in the regular passenger stages—was transmitted from Richmond to Guyandotte in four and one-half days.

In 1831 there was considerable opposition to the increased tolls on the portion of the turnpike which had been completed above Gauley Bridge. Objection was made to the law requiring not only the stages but also the individual passengers to pay a heavy toll. At the Gauley river and Greenbrier river bridges 6 1-4 cents was collected from each passenger. Those who at first refused to pay finally yielded to the strong arm of the law. The "Daily Stage" line, which had been "established at great expenditure," and in the face of great obstacles, applied to the legislature for an abatement of the excessive tolls to which the stages would be subjected" but without success. In 1832 the House of Delegates by a vote of 72 to 44 passed a bill authorizing the James river company to regulate from time to time the tolls on stage coaches using the Kanawha turnpike. By act of March 6, 1833 the toll previously charged passengers on the stage coach or riding carriage crossing Gauley bridge and Greenbrier bridge was abolished.

Notwithstanding the tolls, the stage line attracted much travel

which previously had gone by a more circuitous route. The scenery along the route was an attraction to many travellers.

In 1832 Hall and Trotter of Kentucky established a tri-weekly line of stages from the mouth of the Big Sandy to Guyandotte where it connected with the Kanawha stage line of Porter, Belden & Co. At Big Sandy this line connected with a stage line for Lexington, Kentucky. In order to improve westward connections Kentucky in 1837 began two turnpikes at Big Sandy—one leading toward Owensville, thence to connect with the Maysville and Lexington turnpike, and the other down the Ohio. At Lewisburg connection was made with Caldwell's line which extended eastward through White Sulphur, Salt Sulphur and Sweet Springs and Fincastle and at Teaks' on the Blue Ridge intersected with the line leading east to Lynchburg and Richmond or south to Salem where it connected with the great valley line to Huntsville and Nashville. White Sulphur Springs, a resort which has been crowded with visitors during the warm season of each year since its first opening in 1818, was reached from Washington in three days travel—by steamboat to Fredericksburg, thence by stage via Charlottesville, Staunton and Warm Springs. Callahan's celebrated tavern thirteen miles east of White Sulphur was a center of the travel from all directions—Pennsylvania, Maryland, North Carolina—and an interjunction of several mail routes.

In the Gazeteer of Virginia published in 1835 appears a vivid description of the route from Covington westward over the mountains. "The great state road * * * * passing the gigantic Alleghenies at a grade which is almost level, pursues its winding yet steady course over ranges of mountains, and through wild and hitherto unbroken depths of wilderness and shade. Now and then it courses along the margin of some rocky and stupendous precipice often several hundred if not a thousand feet in depth,—and as the mail coach drawn by four spirited steeds whirls you along the perilous cliff, you feel an involuntary shuddering at the slender barrier which separates you from eternity. The blue mist which hovers along the yawning chasm beneath, and is visible through the variegated foliage which obscures without concealing the view, impresses the mind with undefinable images of danger—and indeed * * * I have been credibly informed that in more than one instance the lives of travelers have been exposed to imminent peril. At one of those narrow defiles * * * the stage with eight passengers and driver rolled down a steep declivity of fifty feet and—although the luckless vehicle turned two or three somersets and was actually shattered into fragments neither horse nor passenger suffered material injury."

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Among the local influences attributed to the turnpike were the decrease of game, the increase of evidence of civilization resulting partly from the immigration of families of refined people from eastern Virginia, and the economic and industrial development resulting from market facilities and the increase of passing travel and traffic.

The route soon became a busy thoroughfare of travel and traffic—an avenue of activity and increasing wealth. In the stage the average citizen might ride with the greatest statesmen and converse with them enroute or at the taverns. Among the passengers of most prominence were Henry Clay who was a great favorite along the route and President Jackson, who in 1832, spent Sunday at Charleston enroute to Washington. Many of the wealthier people who disdained to ride in the stage with the common herd travelled in their own private con-

veyances. Many who were too poor to pay the stage fares travelled by horseback or walked.

Westward over the route passed many families emigrating to Ohio and Kentucky. Hundreds of wagons and other conveyances filled with emigrant families—men, women and children of all ages and conditions—who had left the worn-out lands of Virginia to seek new homes in the states bordering on the Ohio, passed along the road for weeks each year. To some of the more conservative Virginians mourning over the increasing drain of the population, this spectacle of fugitive emigrants "bending their toilsome march to the far West" awakened a melancholy train of reflections in regard to what was characterized as "the last struggle of despairing poverty to escape from the hardships of its lot." The road furnished increased facility for driving hogs to the eastern market, and consequently increased the demand for corn along the route. It was estimated that in the fall of 1826, about 60,000 hogs passed up the valley of the Kanawha, destined largely to Eastern Virginia. This traffic continued until the Civil war, although part of it was diverted by steamboat to Pittsburg and Wheeling in the decade before the war. It stimulated the growth of corn among the farmers, some of whom took advantage of their less enterprising neighbors by meeting the drovers several miles toward the West in order to make advance bargains. It is said that the soil of Teay's valley was worn out by continued cultivation of corn to supply the demand of hog traffic. Sometimes the drovers greatly interfered with other travel for days at a time. After driving the stock through to the Valley, or to Richmond or other eastern cities, they frequently made the return trip on foot.

Freight was usually carried in Conestoga wagons, often painted in gay colors, usually drawn by four or six horses and carrying an average of 1000 pounds per horse. Even after 1852 these wagons were so common that sometimes as many as thirty could be counted in a few hours passing in close proximity and twelve or fifteen could be counted almost any day within the period of travel. Those going east usually included salt in their list of goods. Those coming west were loaded with fruit, and general merchandise—including much plug tobacco to satisfy the refined taste of the western pioneers who were not content with the raw product which they grew at home. Whiskey was also a common article carried on almost every wagon. Many of the wagoners, who endured the hardships of the long journey, "left their religion on the Blue Ridge when they went east with their produce," but, although often rough, they were a jolly crowd who at night enjoyed themselves with fiddling and with bull dances around their camp fires, or with singing negro melodies of which they possessed a fine repertoire. They bought their provisions from the farmers or at the taverns, but they cooked their own meals and drank their own whiskey.

In contrast with the freight wagoners, the stage drivers (young but expert) were aristocrats—stopping at the best taverns and conversing freely with their passengers. The horses behind which they wielded the

whip were the finest that could be obtained from the blue grass region of Kentucky or the Valley of Virginia and were dressed in the finest harness ornamented in brass. Each stage driver drove at a rapid rate, and swiftly turned the shortest curves of the mountains without fear of danger. Unless hailed by prospective passengers he seldom stopped until he reached a relay station—the approach to which he announced by blasts from the tin horn which he always carried at his side. For his expert service he received about $1.00 per day, the highest wage paid on the road at that time.

To accommodate the increasing travel, better houses of entertainment were established at regular intervals along the road. These were successors of the mountain taverns which had appeared very early for the accommodation of the many pioneers who journeyed between East and West before the turnpike was begun. The county court records of the first and second decades of the nineteenth century show a surprising number of taverns which obtained license and "entered into bond and security" as required by law, paying for their license about $18.00 per year. Under the law by which county courts fixed the rates of charge, ordinaries were licensed on the Kanawha below the mouth of Paint soon after 1799, at Coalsmouth soon after 1800, at Lewisburg and at Dennis Callahan's (the center of travel farther east) by 1808 at Salines by 1810, at Barboursville by 1814, at Guyandotte by 1815 and at Culloden by 1818. After the construction of the turnpike, the inn-keepers assumed more of a professional character and many of the inns became more pretentious. Among the earlier improved hostelries opened at Charleston by 1826 was the "Jackson Hall" kept by George Goshorn, the Charleston Hotel conducted by Mr. Spotswood and the popular brick hotel of Major Daniel Ruffner located at a picturesque place a mile and a half above the town. The Ruffner place became a noted stage stand, and was also famous by its proximity to a camp-meeting ground at which many people gathered each year. In 1831, by an unusual activity in the construction of buildings Charleston secured better facilities for the acccommodation of the increasing number of stage passengers who preferred to connect with the stage line at that point. In 1834 the Kanawha House, a brick structure of four stories and thirty rooms, was built near the boat landing. In 1831 a new two-story hotel was erected on Coal river. By 1832, at a point opposite the Kanawha Falls appeared a spacious hotel "kept by a good natured chunk of a man who cast a shadow of nearly the same altitude when lying down as when standing up." The Hurricane Valley tavern was opened by 1833. A new hotel was built at the Salines by 1830 and another by 1834 to accommodate the local travel to that point, from which a hack ran to Charleston morning and evening. Fourteen miles east of the Falls was the large farm and

stage station of Philip Metzker. Ten miles below Charleston, and a mile or two above St. Albans, was "Liberty Hall" owned by Robert W. Poindexter, and previously occupied by Mrs. E. B. Thornton. One mile below Charleston was "Willow Grove" kept by Mrs. Watson. By 1831 there was a ferry and tavern on the Ohio just above the mouth of the Big Sandy at the termination of the turnpike. By 1832 three taverns were scattered along the route between Barboursville and Hurricane bridge. By 1835 there was a hotel at Hansford post office opposite the mouth of Paint creek. At the same time there were three hotels at Lewisburg, the great court town, and several around White Sulphur springs within a distance of six or seven miles. Later, taverns were opened at the foot of Gauley mountain and on top of the mountain four miles east of Hawk's Nest. In 1835 there was an increasing travel resulting from the wide and increasing popularity of the springs east of Lewisburg. By 1836 the buildings at White Sulphur could accommodate 400, and in 1838 it was estimated that 6000 persons visited the resort during the entire season.

The Kanawha turnpike was an incentive to the opening of several later lines. By 1827 there was a post-road from Gauley Bridge to Nicholas county but the mail contractor complained to the justices of Kanawha county that its width was less than the twelve feet required by law. In 1838, the Charleston and Point Pleasant turnpike was built. About 1848 the Giles, Fayette and Kanawha turnpike (begun in 1838) was completed, starting at Pearisburg and passing through Peterstown, Red Sulphur Springs and the present site of Beckley, Mt. Hope, Oak Hill and Fayetteville and joining the Kanawha turnpike at Kanawha Falls. About 1850 a "state road" was constructed from Logan through Boone to Charleston, and over it passed much traffic which declined after the completion of the Norfolk and Western in 1891. About 1850 a turnpike (begun in 1848) was constructed from Gauley Bridge via Summersville, Sutton, Flatwoods and Bulltown to Weston at which it connected with another road leading to the Northwestern turnpike at West Union.*

In 1848 the Charleston, Ripley and Ravenswood turnpike company was incorporated and in 1857 planned a better road northward to the Ohio which was completed by 1861. It was extended to Parkersburg and connected with Ravenswood by a lateral road from Sandyville.

The history of the Kanawha turnpike after 1835 has few new features. In December 1835 the stockholders of the James river and

*From Arnold's station (near Weston) the Glenville, Ripley and Ohio turnpike (dirt road) was constructed by Virginia about 1854-55 via Spencer and Buffalo post office.

Kanawha company consolidated the eastern and western agencies into one agency extending over the whole of the western improvements. Ezra Walker of Kanawha was made agent of the western improvements at a salary of $1500. He had full charge of the Kanawha river and road, collecting the tolls from the collectors and depositing them in the Bank of Virginia at Charleston.

About May 15, 1837, the road was much damaged by floods which washed out eleven of the forty bridges which it crossed. The road was also much cut on the mountain slopes by the wheels of the heavy stages which had no patent locks. In 1840 the company constructed five bridges of which one was on the Burning Spring branch. The construction of a new bridge over Gauley and other improvements on the road were suspended by cholera in the Kanawha in 1848. The arched bridge over Coal river was completed in 1849. A new bridge over Gauley was completed in 1850 and continued in use until its destruction in 1861. Several bridges finished between 1850 and 1854 absorbed much of the revenue from tolls.

Although at the middle of the century the utility of the road was somewhat increased by the reduction of tolls on live stock passing over it, the need of the road was soon greatly decreased by new factors in western transportation. Even as early as 1835 the demands of the people for a railroad or canal connection threatened the increasing business of the road and caused the President (Cabell) of the company to file objections and urge that the railway from Covington to the Kanawha Falls should be deferred until the completion of the water improvements of the line. In 1853 although the turnpike was in good condition, travel on it was manifestly dimished. At the same time the business on the Kanawha river was increasing. At Charleston could be seen steamers towing flatboats loaded with iron rails imported from Wales for the mines above the town. By 1854, synchronous with the increase of travel on the river and the connection of railroads with the Upper Ohio, the travel on the road was greatly diminished and the income of the company from the turnpike depended entirely on the prosperous business of the salt manufacturers at the Kanawha Salines. Early in 1855 travelers from Guyandotte to secure most speedy conveyance to Richmond went via Cincinnati and Columbus, Ohio. Tri-weekly four-horse stages owned by W. P. Parish and Co. still made trips to points eastward as far as Lynchburg but the roads were in a "horrid condition." Such conditions furnished reasons for urging appropriations for the completion of the Covington and Ohio railway westward through rich regions whose inhabitants

were deprived of all facilities for travel except mud turnpikes. By 1860 the eastern terminus of the stage lines was at Jackson river depot, now Clifton Forge, which was then the western terminus of the Virginian Central railway (now the C. & O). The decline of the turnpike was completed by the ravages of war resulting in the destruction of the Gauley and Greenbrier bridges and leaving the road in a very inferior condition. The busy life along the route never returned. White Sulphur Springs was reopened in 1867, but even here there was a noticeable absence of much of the society which had once given life and gayety and grace to the resort. A few years later a new era of life along the route was introduced by the completion of the railway from Covington to Huntington.

3. THE STAUNTON AND PARKERSBURG TURNPIKE.

Across the territory of West Virginia north of the region drained by the Kanawha, the Staunton and Parkersburg turnpike upon which the state spent considerable money was a factor of no small importance in local development. The story of its inception and its construction may be indicated briefly. By an act of 1823 the Board of Public Works was directed to inquire into the expediency of directing the public engineer to survey and mark a road by the nearest and best route from Staunton to the mouth of the Little Kanawha. Following the prompt preliminary report of the board, in March 1824, the Assembly made small appropriations from the revenues of Pendleton, Pocahontas, Randolph, Lewis and Wood to be used in opening the road provided each of these counties would appropriate an amount equal to the sum provided by the state. An act of February 1826 authorized an increased state aid ($3200) and directed the commissioners of each county to meet at the mouth of Riffles' Run in order to locate the remainder of the road via Beverly and Weston. At the same time, Wood county was allowed additional time to raise the amount which it was required to contribute by the act of 1824. In 1828, the principal engineer was directed to inspect the road from Weston to Parkersburg, and was given power to change the route or location. In 1830, commissioners were appointed by act of the Assembly with power to raise by a lottery $50,000 to complete the road, and the county courts of Pendleton, Pocahontas, Randolph, Lewis and Wood were each required to appoint a superintendent to complete the work in their respective jurisdictions. To each of these counties the lottery money was to be distributed according to a stated proportion. In 1832 there was an additional appropriation, of which a given proportion was

to be provided for each county which would raise an equal amount. Some of the counties by act of 1836 were given additional time to meet the requirements. In 1837, Wood county which had failed to raise the amount required was again given additional time.

A step toward greater activity was taken by the act of 1838 which authorized the Board of Public Works to borrow $150,000 with which to construct a turnpike from Staunton through Dry Branch Gap, with a width of not less than 15 feet in addition to side ditches. In the same year, the principal engineer made a report pointing out five different routes for the northwestern part of the road—one of which utilized twenty-three miles of the Northwestern turnpike from the Three Forks of Goose creek, and another of which proposed to unite it with the Northwestern turnpike which could be utilized for the fifty miles west of Middle Island creek.

The work of construction began at both ends. On the west end one of the chief difficulties was the backwater which increased the need for additional bridges, and also induced the engineer to select a route which did not immediately follow the Little Kanawha. Here, Wood county declined to give aid in preserving the road. At the east end work was delayed by labor conditions. There, the reduction of the price of labor was secured much later than in the west. The beginning of operations was delayed, especially by the continued demand for labor on the Valley turnpike and on the James river. Finally, with an anticipated reduction of wages to $10.00 per month at each end of the road, operations on the east were begun, but in the middle of December (1838) they were stopped for the winter.

As the work of construction advanced, the Board of Public Works in 1841 were given all the powers and privileges concerning the tolls, etc., that had been conferred on the president and directors of the Northwestern turnpike by act of 1840. The shorter and better route through part of Randolph was changed by an act of 1842 which made Beverly a point on the road, on condition that the citizens of Randolph would pay $4200 on construction and that owners of land would relinquish all claims for damages. An act of 1845 authorized a loan of $30,000 to complete the road between Weston and Beverly, another of 1846 appropriated $5000 for a bridge over the Valley river at Beverly, and another of 1847 appropriated $15,000 for bridges across the Valley river at Huttonsville, across the West fork at Weston, across the south fork of Hughes river, and across Stone Coal creek and other creeks. An act of 1848 appropriated an additional $10,000 for bridges and an act of 1849 authorized a loan of $60,000 for macadam-

izing parts of the road. An additional appropriation was made in 1852 to repair and reconstruct bridges and embankments which had recently been injured and destroyed on the road; and $100,000 was appropriated in 1853 for use in macadamizing, planking and bridging. According to the report of the Superintendent, John Brannon of Weston, the road at this date was in very bad condition resulting from winter and spring freshets, and the tolls were not adequate for repairs. The bridges on the north and south forks of the Hughes river required stronger masonry and higher location. An act of 1860 again provided for the repair of damage done by recent floods. An act of April 1, 1861, authorized the appointment of two superintendents with separate jurisdiction divided by Cheat mountain. By an ordinance of the Virginia convention of June 14, 1861, the Governor was authorized to build bridges and make other repairs on the road in Randolph for use for military purposes.

At the close of the war much of the road was in a very bad condition; but, along the larger part of the route, it has continued to be used for local travel. Tolls were collected in Randolph by order of the county court until about 1898.

4. THE OLD NORTHWESTERN TURNPIKE.

The old Northwestern turnpike, extending from Winchester, Virginia, on a general westward course to Parkersburg on the Ohio, is a historic highway which deserves more mention than it has ever received as a factor related to the American westward movement and to the problem of communication between East and West. It was the inevitable result of the call of the West and the need of a Virginia state road.

Perhaps its first suggestion was recorded by Washington, who in 1758 had been the champion of the Braddock road (not then supposed to lie in Pennsylvania) and who in 1784 sought a route located wholly in Virginia. Returning from a visit to his western lands, after following McCulloch's path (then the most important route across the ragged ridges between the valleys), he crossed the North Branch on the future route of the greater Virginia highway—which was first partially realized in the "state road" authorized from Winchester via Romney to Morgantown before 1786, and extended westward in 1786 by a branch road from near Cheat to Clarksburg, from which the first road was marked to the mouth of the Little Kanawha between 1788 and 1790.

The later turnpike was planned and constructed by Virginia partly

as a result of the rival activities of New York, Pennsylvania and Maryland to secure the advantage in transportation facilities for the trade of the West; and was especially regarded as a rival of the national road which was opened from Cumberland to Wheeling in 1818, and with which parts of Virginia obtained better connection in 1830 by a stage line established from Winchester to Cumberland. It was built across the Appalachian divide with the hope of securing commercial superiority, and was the main thoroughfare between East and West through northern Virginia.

The act of incorporation of 1827, authorizing subscriptions at Winchester, Romney, Moorefield, Beverly, Kingwood, Pruntytown, Clarksburg and Parkersburg, made the mistake of arbitrarily locating the route through important towns without proper consideration of the physical features of the country. After finding a way through Hampshire via Mill Creek Gap in Mill Creek Mountain, and pushing on into Preston the engineers encountered insurmountable obstacles to the Kingwood route, causing the stock to languish.

The enterprise was saved by the remarkable act of 1831 which organized a road company, with the governor as president and one of the board of directors, with power to borrow money ($125,000) on the credit of the state to construct a turnpike road of a minimum width of twelve feet, "from Winchester to some point on the Ohio river to be situated by the principal engineer," and with the right to erect bridges or to regulate ferries already in existence and to establish toll gates on each twenty mile section completed.

The chief engineer was Col. Claudius Crozet, a French officer of artillery under Napoleon Bonaparte in the Russian campaign, and later professor of engineering in the United States military academy from 1816 to 1823. He was assisted by Charles B. Shaw.

The route chosen was through Hampshire, Mineral, Grant, Garrett, Preston, Taylor, Harrison, Doddridge, Ritchie and Wood—all in West Virginia except Garrett wihch is in Maryland. In Hampshire county it was established via Capon Bridge, Hanging Rock, Pleasant Dale and Augusta to Romney west of which it crossed the South Branch. Through Mineral it passed via Burlington, thence westward across Patterson's creek, and through Ridgeville on the divide to New creek which it crossed at Rees' tannery. Then turning toward the southwest, it crossed the North branch of the Potomac southwest of the present town of Gormania and entered the southwest corner of Maryland through which it passed for eight and three-fourths miles, crossing the Alleghenies and emerging into Preston east of the Ger-

man settlement (later known as Aurora). It passed across the picturesque Cheat valley considerably south of Rowlesburg, and via Fellowsville, Evansville, Thornton, Grafton, Pruntytown and Bridgeport to Clarksburg, thence over the summit via the head of Ten Mile creek to Salem, thence across Middle Island creek at West Union and via Tollgate, Pennsboro, Ellensboro (earlier Shumley) the head of Goose creek, and Murphytown, to Parkersburg. Much of the route passed through a vast wilderness interspersed here and there by a few old settlements and towns.

No longer dependent on the larger towns for its success, the road was completed through the wilds of Preston, considerably south of Kingwood, in 1832, and was opened westward to Clarksburg and Parkersburg by 1838. Its construction cost $400,000. It crossed the mountains by easy grades and the larger streams (in some sections all the streams) by good bridges. It was macademized from Tygart's Valley river to Parkersburg in 1848. About 1852, it was further improved by construction of new bridges across several streams at important crossings. In 1840, facilities for travel and news were increased on the western end of the road by the establishment of a daily line of stages, and a regular mail service, which made connection with the Ohio steamers at Parkersburg. By 1845, there was a line of fast tri-weekly stages from Romney to the Ohio at Parkersburg. It connected at Romney with stages from Winchester, from Moorefield and from Green Spring at which connections were made with Baltimore by trains of the B. & O. railway. The fare from Green Spring to Parkersburg (210 miles) was $10.00.

The road, establishing commercial and other relations, soon became a busy thoroughfare of travel and traffic which stimulated the creation of many inns and towns along the route—such as Aurora, Fellowsville, Evansville (1833), and West Union (1846). In many ways it influenced the material prosperity and social life of the people of the region through which it passed. Following the act of 1831, which provided for more satisfactory adjustment of land titles, it was an important incentive to immigration and settlement and development—especially along the region of southern Preston and in Ritchie. Its construction also stimulated the construction of intersecting roads, such as the Brandonville pike, starting from Somerfield, Pennsylvania, passing via Kingwood, and connecting with the Northwestern at a point which became Fellowsville by 1848. It also doubtless influenced the legislature in 1837 to provide for a survey of Cheat from the turnpike crossing to the Pennsylvania line. On some parts of its course

it furnished the incentive for the establishment of inns to meet the needs of those who desired to escape the heat of the seaboard by a summer sojourn amid the wild beauty of the mountains, whose streams were filled with trout and whose forest furnished a home for deer and other game.

Beyond the headwaters of the Potomac, it passed over the Backbone, opening the way to a remote and inaccessible region bordering on the land of Canaan, which was made famous a few years later by "The Clerk of Oxenfords" (David Hunter Strothers) in "The Blackwater Chronicle" and later by the same writer under the *nom de plume* "Porte Crayon" in "A visit to the Virginia Canaan."

It might have been a road of greater importance if Virginia soon after its completion had not been induced to divert her interest from turnpikes to canals—influenced by the completion of a Pennsylvania system of transportation connecting with the Ohio at Pittsburg. West of the Alleghenies, it was extensively damaged by the numerous heavy cattle driven over it in the winter and early spring. It was also much injured by high waters, especially in 1852 and 1853.

Although it never became of national importance as did its more renowned national rival at the north, it was for awhile the busy scene of much business of a national character and gave fair promise of serving well the purpose for which Virginia had planned it until its larger usefulness was transferred to its horseless rival which, persistently overcoming obstacle and opposition, reached Cumberland by 1845, Grafton in 1852 and Parkersburg in 1857.

Supported by a sentiment that long scorned the possibility of competition and that later opposed any improved system of transportation which, by absorbing the slower traffic, might close the taverns and ruin the local market for grain and provisions, it was finally paralleled by a railroad which diverted its travel and traffic, created rival towns, and brought pioneer prospectors and promoters who prepared the way for the later era of larger industrial development.

Although its utility was diminished by proximity to the railroad, it was still kept in moderate repair in the decade after the close of the war, and it has continued a constant local benefit to the territory through which it passes.

V. The First Railroad

1. EARLIER CONCEPTION AND DIFFICULTIES.

The beginning of the era of larger industrial development in West Virginia was due to the enterprising spirit of a few of the shrewder business men of Baltimore who feared the doom of their city's prosperity was foreshadowed in the diversion of trade and emigration from the National turnpike to the route of the Erie canal around the northern flank of the Alleghenies. After realizing that the completion of the Chesapeake and Ohio canal would by its expense prove inexpedient as a measure calculated to counteract New York's advantage, or to retain Baltimore's inherited commercial prestige, these men decided on the feasibility of a railroad from Baltimore to the West and faithfully and persistently pushed their plans to completion.

The Baltimore and Ohio railway was incorporated by act of the Maryland legislature on April 2, 1827. Desiring to reach the Ohio by the most southern route possible, the directors of the corporation asked Virginia for permission to construct its lines along the Shenandoah to the headwaters of the Kanawha and thence by that stream to the Ohio. Although the inhabitants of the Valley and of the Kanawha heartily indorsed the scheme, the Assembly refused the request and restricted the western terminus to such point as the company might select north of the mouth of the Little Kanawha* In 1828 Pennsylvania authorized the company to construct part of the proposed line across the state, on condition that it would locate a branch terminal at Pittsburg, and one of the earlier surveys followed the general course of the National road, crossing the Monongahela at Brownsville.

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*The people along the Kanawha made strenous efforts to secure the road. On July 20, 1827, at the inception of the project, they sent a memorial to the president and directors of the railroad company, urging that the route from Baltimore via Staunton to the Ohio at Point Pleasant or to Kanawha Falls presented more advantages than the route by Cheat and the Monongahela or any more direct Virginia route along which many stationary engines would be required. Among other advantages mentioned for this route was the convenience of connection with the lower part of the Ohio and Erie canal between Cleveland and Portsmouth via the Scioto, which was planned for completion in 1831, and which might be reached directly by an extension of the railroad from Point Pleasant to the mouth of the Salt creek on the Scioto.

In 1831, the people of the Kanawha urged that the Baltimore and Ohio should be allowed to construct its lines through the Valley of Virginia, and thence via the Kanawha to the Ohio. Kanawha delegates endeavored to amend the act incorporating the Staunton and Potomac railroad company so that it might be able to extend its proposed lines westward from Staunton via the Kanawha to the Ohio. The conservatives of the East, however, feared that the Baltimore and Ohio was back of the Staunton and Potomac. The amendment was defeated 58 to 53. At the same time the Lynchburg and New River Railroad company was incorporated to divert the trade of the West to the James river. It contemplated a lateral line to the Tennessee boundary. Both these enterprises were killed by the defeat of an appropriation bill of $2,000,000 to aid the companies and other internal improvements. In 1829 an attempt was made in the eastern part of the state to secure a repeal of the act of incorporation in order to keep the road out of the state entirely. At the same time Virginia began to oppose the scheme of connecting the Potomac and the Ohio by a canal, probably because the Chesapeake and Ohio canal had become largely a national enterprise.

FOUNDERS OF THE BALTIMORE & OHIO RAILROAD COMPANY.

GEO. BROWN, 1787-1859. BENJ. C. HOWARD, 1791-1872. ALEXANDER FRIDGE, 1766-1839. TALBOT JONES, 1770-1834. PHILIP E. THOMAS, 1776-1861. WILLIAM PATTERSON, 1752-1835. ROBERT OLIVER, 1757-1834. CHAS. CARROLL OF CARROLLTON, 1737-1832. ALEXANDER BROWN 1764-1834. J. V. L. MCMAHON, 1800-1871. CHAS. F. MAYER, SR., 1791-1864. FIELDING LUCAS, 1782-1854. W. G. MCNEILL, 1800-1853. ISAAC MCKIM, 1775-1838. BENJ. H. LATROBE, 1806-1878. PETER COOOPER, 1791-1883. SAM'L F. B. MORSE, 1791-1872. LOUIS MCLANE, 1784-1857. CHAUNCEY BROOKS, 1794-1880. WM. G. HARRISON, 1803-1883. THOS C. JENKINS, 1802-1881. THOS. SWANN, 1809-1883. JOHNS. HOPKINS, 1795-1873. ALBERT SCHUMACHER, 1802-1871. J NO B. MORRIS, 1785-1874. JNO. W. GARRETT, 1820-1884. JNO. H. B. LATROBE, 1803-1891.

View of Harper's Ferry (From Bolivar Heights).

View of Cheat River (From the B. & O. Railroad, near Rowlesburg).

The company was organized with a capital of $3,000,000 of which $500,000 was subscribed by Maryland, $500,000 by Baltimore. The remainder was promptly secured by subscriptions at Baltimore, Frederick and Hagerstown.

On April 5, 1828 the engineers reported on their survey* and on July 4 amidst imposing ceremonies the corner stone of the road was laid by Charles Carroll of Carrollton, the only surviving signer of the Declaration of Independence. Soon discovering by actual work that the cost of construction had been underestimated, the company increased the capital stock to $5,000,000 and made an effort to secure from Congress an appropriation which failed through the opposition of the canal lobby.

The first brigade of cars, each operated by one horse, began tri-daily trips between Baltimore and Ellicott City on May 24, 1830 at a rate varying from seven to thirteen miles an hour. Soon thereafter experiments were made with a lighter "sailing" car rigged with a mast and square sails to catch the force of the wind. Later, a horse motor car of the tread-mill pattern was tried. Finally, in August 1830, Peter Cooper made the trial trip of the first American locomotive—a working model improved for the occasion and constructed in a carriage maker's shop. Although on the return trip the crude locomotive lost in the historic race with the gray horse, it solved the problem of steam power for the railroad.

The completion of the track to Point of Rocks on the Potomac, on April 1, 1832, was followed by a steadily increasing traffic and travel from the river above which assured the future success of the road and indicated that it had outgrown the earlier conception of a mere improved form of toll road. At this point the enterprise was halted by a decision of the Court of Appeals in favor of the Chesapeake and Ohio canal, which contested the right to occupy the narrow valley of the Potomac and generously invited the railroad company to abandon its work and devote its resources to the completion of the canal. By interference of the legislature which compelled a compromise, the railroad company subscribed for 2500 shares of the canal stock and submitted to obnoxious regulations to prevent fright of the tow-path

*The engineers made reconnaissances or surveys on several routes terminating on the Ohio at various points from Pittsburg on the north to Parkersburg on the south. One of the early routes surveyed passed down Muddy creek in Preston and down Decker's creek via Morgantown and across the southwest corner of Pennsylvania. The change of route may have been partly due to the opposition shown both in Monongalia county and in Greene county (Pennsylvania) by people who feared the innovation would seriously affect the price of horses and horse feed, and the lives of wives and children and of cows and hogs. "Compel them to stop at Cumberland," they said in their meetings, "and then all the goods will be wagoned through our country, all the hogs will be fed with our corn, and all the horses with our oats. We don't want our wives and our children frightened to death. * * * We don't want our hogs and cows run over and killed."

horses—including a demand to haul its trains by horses through the passes along side the canal.

After securing the repeal of these petty regulations, the directors of the road, after May, 1833, pushed their tracks forward to Wager's Bridge opposite Harpers Ferry at which connection was made with the short Winchester and Potomac road on December 1, 1834, producing an immediate stimulus to the business of the road, coincident with the introduction of better cars and additional engines and the invention of various devices such as switches and turn tables.

At this point westward extension was abandoned for several years during which the Democratic legislature of Virginia from 1835-1838 continued to deny the requests of the company for authority to construct its lines through the Whig counties of central Virginia. In 1837, after reports of reconnaissances of the engineers from Harpers Ferry to Wheeling and from Cumberland to Pittsburg had been made, the directors recommended the extension of the line to Cumberland at a cost of $4,600,000. Although Maryland and Baltimore each agreed to subscribe $3,000,000 and Maryland paid her subscription in bonds, no money was available either to meet the additional cost of new construction or to rebuild the crude and inadequate experimental road already constructed to meet the necessities of growing traffic, and it was necessary to overcome objections to the extension of the railway parallel to the canal.

2. HARPERS FERRY TO CUMBERLAND.

Finally, in 1838, construction through Virginia territory was made possible by an extension of the time limit of the earlier charter for five years by the Virginia legislature on the condition that the route should pass through Virginia from Harpers Ferry westward to a point near Cumberland and that Wheeling would eventually be one the termini. At the same time Virginia added a new subscription of $1,058,420 to the subscription of $302,100 made to the stock of the company in 1836.

In the face of overwhelming difficulties the directors, adopting the expedient of paying bills by certificates redeemable in Baltimore city six per cent stock at par, began actual construction again in 1840 and completed the road to Cumberland on November 5, 1842. The extension increased the yearly earnings from $391,070 in 1842 to $575,-205 in 1843 and $658,619 in 1844. At the same time there was a reduction in passenger rates due to the completion of Pennsylvania lines

of road.* The amount of transportation resulting from the wagon traffic over the National road was also smaller than had been anticipated, causing a disappointment which continued until the completion of the road to Wheeling. The effect of the road on the region through which it passed may be illustrated by Harpers Ferry which changed from a sleepy village to a sprightly town, and by Cumberland which increased in population from 1162 in 1830 to 6,105 in 1850 and became the most important place between Baltimore and Wheeling.

Failing in an attempt of 1844 to secure money from Europe to extend the road to the Ohio upon whose navigation the company largely relied for expectations of traffic, the directors in 1846 sold bonds at ten per cent discount to finance the reconstruction of the Baltimore-Harpers Ferry section (81 miles) on which the antiquated plate-rail was replaced by the new edge-rail.

3. SELECTION OF ROUTE FROM CUMBERLAND TO THE OHIO.

The postponement of further extension from 1842 to 1848 was due to lack of money and credit and to the difficulty of securing additional legislation necessary to extend the time limit (1843) provided in the Maryland act of 1836 and the Virginia act of 1838. Although Maryland extended the time to 1863 by act of 1842 (which also ordered the sale of the state's interest in all internal improvements), Virginia delayed for several years. In 1845, however, the Virginia legislature was asked to consider a bill authorizing the extension of the line through Virginia to the Ohio but with no mention of a definite location for the terminus which was sought by almost every town along the river. The railroad company, seeking the shortest route of connection with Cincinnati, preferred a river terminus at Parkersburg which probably had the best claims to advantages of geographical location—especially in connection with the projected plans of the Marietta and Cincinnati and the Cincinnati, Hillsboro and Parkersburg railways which were seeking an eastern route. Nevertheless, Parkersburg lost on the first skirmish. Mr. Edgington moved to amend the bill by specifying Wheeling as the terminus. Although the bill with the amendment became a law, the stockholders of the road rejected it, considering it impractical and its conditions (as to rates, taxation, routes, etc.) onerous. Meantime, the legislature of Pennsylvania, possibly influenced by the plans of the Pennsylvania railroad which

*At one time the directors of the Baltimore and Ohio railroad company being interested in the proposed Pittsburg and Connellsville railway were inclined to abandon the Wheeling route in favor of the route to Pittsburg, and authorized a loan of $3,000,000 to build a connecting line to Connellsville.

was begun a year later, failed to pass a law authorizing the construction of the road by a route through western Pennsylvania.

During the summer and fall of 1845 the struggle between Parkersburg and Wheeling was renewed on the home grounds. A convention of those counties favorable to the terminus of the road at Wheeling was held at Fairmont. Resolutions were adopted in favor of the law of the preceding legislature. On November 23, 1845, at an internal improvement convention held at Clarksburg, resolutions were adopted in favor of a liberal charter for the railway. Discussion in the newspapers both in eastern and western Virginia was very full and often very amusing. Lengthy arguments were made concerning the question whether the shortest distance from Baltimore to Cincinnati could be found through Parkersburg or through Wheeling. A dispute arose as to which place was the head of navigation. It was a matter of great importance whether up-river boats could reach the river terminal of the road all the year to deliver their cargoes.

The real objections of tidewater Virginia to the enterprise, irrespective of the question of western terminus, were voiced by the Richmond Enquirer, which, after asserting that the road would result in no economic benefit to western Virginia equivalent to the extra tolls which it would charge on commodities produced along the route, exposed the reason for its solicitude by solemnly warning the people that a railroad through that region would divert trade from Richmond to a rival city in a neighboring state. Another objection from a neighboring region was expressed by the Lynchburg *Virginian* which urged that a railroad in northwest Virginia would injure the projected James River and Kanawha system of improvements which the state proposed to connect by a canal across the Alleghenies. From this standpoint the completion of the railway to Parkersburg was much more dangerous than the completion of the proposed line to Wheeling, which passed through a peripheral region whose trade the tidewater section could no longer hope to control. To those who desired to push the Baltimore and Ohio as far out of the state as possible, the Wheeling terminus seemed the least objectionable.

In spite of a flood of petitions requesting the authorization of a railway from the East via Clarksburg to Parkersburg, the Virginia legislature in December 1845 failed to enact the Potomac and Ohio railway bill and at the same time granted the Baltimore and Ohio three years to begin its line to Wheeling and fifteen years to finish it.

The fight for a railway to Parkersburg was renewed with increased vigor. At Weston, in the summer, a general convention was attended

by 1400 delegates selected from various counties of the Parkersburg district. It especially expressed strong feeling against the unjust discrimination of the Southeast against the prosperity of the Northwest whose representation under the existing constitution was too low.

To counteract the effects of any railroad which Parkersburg was almost certain to secure by determined efforts, and to save the traffic of this section to eastern Virginia markets, tidewater interests planned a road from Lynchburg via the Valley of Virginia and down New river to steamboat navigation on the Kanawha and later proposed to complete it to Guyandotte on the Ohio. Similar interests also projected an all-Virginia road from Alexandria via Moorefield and Weston to Parkersburg.

Finally, in March 1847, possibly influenced in part by the Pennsylvania grant of the Connellsville railroad charter, the Virginia legislature became more friendly to the railway and granted an act authorizing the extension of the road through Virginia on restrictive terms acceptable to the company. This act providing for the beginning of construction within three years and completion within twelve and designated a route via Three Forks and the mouth of Tygart's Valley* and thence to the Ohio by either Grave or Fishing creek and along the Ohio to Wheeling. It also required all parts of the road between the Monongahela and the western terminus at Wheeling to be opened simultaneously for the transportation of freight and passengers. It also annulled the stock subscriptions made by Virginia in 1837 and 1838 and made provisions as to connections, erection of depots, taxation and other regulations. At the same time Wheeling was given authority to subscribe $1,000,000.

4. CONSTRUCTION FROM CUMBERLAND TO WHEELING.

In 1848, the large cost of the construction of the remaining two hundred miles of extension to Wheeling, through the roughest region yet traversed by an internal improvement in America, was partly made possible by funds and prestige secured from the sale of $1,000,000 of "unsalable" state bonds to Baring Brothers with whom they had previously been deposited as security for railway supplies. In 1848, also, the management of the road adopted the policy of applying net revenue as capital and of issuing stock dividends instead of money. It issued bonds for rails bought in London. The peculiarly difficult conditions were met by the ingenuity of Chief Engineer B. H. Latrobe and his assistants, and by the motive power supplied by the re-

*This route was practically determined by the foresight of Thomas Haymond, representative from Marion county.

sourceful mind of Ross Winans, the indefatigable inventor and locomotive builder. In the summer and fall of 1848, Engineer Latrobe induced by the difficulties of a suitable route over the mountains and across the valleys of the Cheat river and Tygart's Valley river regions, secured the services of two other expert engineers. After careful surveys, he reported the selection of a route on which construction was practicable. The estimated cost of the road was $6,278,000.

Although some of the directors proposed to complete the road only to Fairmont, President Swann urged active measures to push it through to Wheeling as originally planned. The construction of the four years which followed (1849-52), through the mountains, over ravines and rivers, through tunnels drilled in the rocky mountain-side, up steep ascents and around perilous curves, was achieved without adequate funds to execute the matured plans and in the face of other obstacles. Between Cumberland and Wheeling eleven tunnels were bored and 113 bridges were constructed. The bridge across the Monongahela, 650 feet in length, was then the largest iron bridge in America.

In spite of engineering obstacles between Cumberland and Wheeling the road was carried rapidly forward. The Wheeling end was built as a separate section. The first engine on that part of the road was brought to Wheeling via Pittsburg.

In 1850 controversy and dissension arose in connection with the decision of the directors of the road to follow the Fish creek route to the ravine of the Ohio. At one time an attempt to stop the progress of the road in the state was made by the citizens of Wheeling who contended for the Grave creek route to the Ohio. By law of March 21, 1850, the dispute was submitted to a board of engineers which made a decision adverse to the company. Bitter controversy was averted by the stockholders of the road who submitted to the desires of the people of Wheeling. At the same time Wheeling agreed to pay the road $50,000 for release from an agreement of 1847 to furnish right of way through the city streets and a depot on two acres of ground north of Wheeling creek.

In spite of the previous scarcity of labor, the operations in 1850 were conducted by 3,500 laborers and 700 horses. Employment was given to the native inhabitants who sought work along the route, and the increased demand for food benefitted the people for miles around. New towns began to rise along the route—especially near the location of tunnels and bridges. The completion of the section from Cumberland to Piedmont was celebrated in 1851 with a formidable excur-

sion from Baltimore. At the same time, Engineer Latrobe promised that trains would run into Wheeling by January 1, 1853.

Then followed a series of triumphs over the difficulties in the mountains. The road was pushed from Piedmont westward across Preston county, through the haunts of roaming pack-wolves, and parallel to the extensively travelled route whose immense throng of people was soon to be diverted to newer routes of more rapid travel. After passing over deep gorges on high trestle work, and over turbulent streams by heavy masonry work, at Tunnelton it passed through the longest railroad tunnel which had yet been constructed in the world and continued westward toward Fairmont creating new towns (Rowlesburg, Newburg etc.) in the region which was still sparsely settled, and bringing the pioneer prospectors who prepared the way for the later era of great industrial development based on coal and timber. In order to hasten the work westward beyond the site of the Kingwood tunnel which was not yet opened, and to get the road into Wheeling on schedule time, a remarkable achievement was performed by conveyance of materials over the top of the mountain on a temporary track which had a grade of 530 feet per mile. To this point cargoes of supplies, which for part of the year reached Morgantown from Pittsburg by steamboats, were transported by wagons from the head of the Monongahela navigation. By the same route, or across the country from the National road, also came bands of Irish laborers inquiring their way to the "big toonel."

Just above the site of Tunnelton, on Tunnel Hill, on the pike in the direction of Fellowsville a hamlet known as Greigsville sprang into existence, grew to a busy town resembling the frontier terminal stations of the later transcontinental Union-Pacific, and melted away with the cessation of the construction of railroad and tunnel. It was the scene of the termination of the "Irish War," of the combined factions of Connaughters and Corkers (about 500) against the Fardowners who, after being driven eastward from the scene of the construction camp at Fairmont and partially dispersed at Newburg, were finally relieved from further disturbance at Tunnel Hill by the prompt action of acting sheriff, Colonel J. A. F. Martin who with a force of 130 men dispersed the invading force and arrested several leaders. Many of the Irish laborers, although in some instances they engaged in disturbing factional fights during the construction of the road, became permanent residents and contributed a useful element to the citizenship of the state.

The new village of Tunnelton, the neighboring successor to the con-

structiontown of Greigsville, was located on the railway ten miles south of Kingwood, at the head of Pringle's run, where the primeval forests were first broken in the summer of 1849 by the railway surveyors who announced to the neighboring farmer-pioneers the advancing invasion of steam transportation on the Ohio. It was built on land acquired by Hon. James C. McGrew who, perceiving the advantageous position erected the first house and the first store which furnished the nucleus for the future town. It was largely supported at first by timber and lumber industry, to which was added a large tannery in 1858. Later Mr. McGrew, after opening mines and constructing tramways and other structures, began to mine and ship coal to supply the increasing demand in eastern cities; but he was forced to abandon his enterprise by a discirmination in freight rates in favor of other mines farther west in which railroad officials were interested. The first postoffice immediately followed the opening of the railroad.

New industrial life began at many points and stimulated new enterprises. The stave industry was begun at Independence in 1853. The first circular saw mill which entered the county began operations two miles south of Tunnelton in 1854. Another began work at Newburg in 1865 and a third at Austen in 1867 and three years later they were at work in other sections of the county. By 1852 Cranberry Summit and Rowlesburg had also become centers of considerable lumber and timber business, and coal mines were extensively operated at Newburg and Austen. Coal mines were opened at Newburg in 1855 and at Austen eleven years later. The Orrel Coal company which operated the Newburg mines after 1856 also acquired timber lands. The revival of interest in the iron industry is shown by the construction of the Virginia Furnace on Muddy creek in 1853 by Harrison Hagans who shipped his product by rail to Cranberry Summit, and by the later enterprise of George Hardman near Independence (Irondale) in 1859 and at Gladesville in 1869. The demand for better highways was also increased. The West Union and Morgantown turnpike was opened in 1854. Brandonville was connected with the railroad in 1857-58 by a turnpike terminating at Cranberry Summit.

The rapid development of the region along the new railroad resulted in an unsuccessful attempt to remove the county seat from Kingwood to the east side of Cheat at the suspension bridge. Kingwood increased its hold on the county seat in 1857 by erecting a fire brick courthouse to replace the small stone structure. This hold was strengthened a year later by the establishment of Kingwood's first

newspaper; although in 1869, when the court house was burned by an incendiary, the question of removal to Cranberry Summit (later Portland and now Terra Alta) was agitated.

With the gradual development of the eastern part of the county, there was a revival of the old boundary dispute with Maryland which persisted until it was finally settled by the decision of the United States Supreme Court in 1910 and the survey which followed.

In November 1852, as the Baltimore and Ohio was pushing westward through southern Preston and via Fairmont to the Ohio at Wheeling, enterprising citizens of Preston and Monongalia counties desiring to develop the great mineral wealth of the region secured from the legislature the incorporation of a company to build a branch railroad by 1857 from the mouth of Cheat via Morgantown to intersect the Baltimore and Ohio at Independence.* Although the enterprise failed through lack of general interest and financial means, its inception was prophetic of the great industrial development of the region half a century later.

West of the southern part of Preston was a region retarded in development organized as Taylor county in 1844 following the new stimulus to greater development resulting from the opening of the Northwestern turnpike. Its first village of any importance was Williamsport, or Pruntytown, situated near the ferry across Tygart's river, whose growth was influenced first by Rector College which reported 110 students in 1840, and later by its selection as the county seat. In 1845 it had grown to a town of thirty dwellings, three stores and two churches. Wonderful changes in the industrial and social life of the country followed the construction of the Baltimore and Ohio railroad. Shipments of cattle and other sources of wealth were made with larger profits. Timber resources were utilized, agricultural interests were improved, coal mines and other mineral deposits were opened, manufacturing and commercial interests flourished and thriving business centers were created. Fetterman, bright with prospects of rapid growth, became a way station only through enthusiastic over-confidence of its citizens which induced them to elevate the price of land beyond that which the railroad promoters proposed to pay.

*Monongalia county, regretting the earlier opposition which had been a factor in diverting the route of the road to Fairmont, made new efforts to escape from her comparative isolation. Enterprising citizens also urged another road—"The Monongahela and Ravenswood Railroad"—which the legislature incorporated in 1854 to connect Morgantown with the Ohio, but which never got beyond the paper stage of projection. This road was really conceived as a link connecting the Pennsylvania lines with the Ohio at a terminal point which, situated below Parkersburg, was believed to possess advantages over either Wheeling or Parkersburg as a satisfactory head of navigation, and which therefore would give an advantage in securing control of the trade of the Ohio valley. At the same time, efforts were renewed to secure better facilities for river transportation on the Monongahela.

Grafton, founded in the woods at Three Forks,—its first house constructed by Mr. McGraw one of the many "railroad Irish" whose descendants have become prominent and useful in the affairs of the state —grasped the opportunity which Fetterman failed to seize, obtained the location of railroad shops and buildings, became the division stop for the change of engines and crews, and later flourished as the terminus of the Parkersburg branch known as the Northwestern Virginia railroad. Largely the creation of the Baltimore and Ohio, the new town also later received a new stimulus to growth by securing the location of the court house which in 1878 was finally removed from Pruntytown. Its railroad facilities attracted capital to the town, gave it excellent manufacturing plants and made it quite a mercantile center. Before the extension of branches of the Baltimore and Ohio it was the market for all the timber from Buckhannon and Valley rivers—which was floated down and caught in the boom above the town, but later the timber was sawed nearer its source and the lumber shipped by railroad.

West of Grafton construction was continued down Tygart's Valley to its mouth, thence following the oppposite side of the Monongahela to Fairmont to which the road was opened on January 22, 1852. Here a decided increase in the population of the county had begun in 1849 through the immigration which followed closely on the heels of the surveying engineers of the Baltimore and Ohio. Some of the emigrants were Irish, fresh from the bogs of Connaught and the lakes of Killarney, who carried with them all their local feuds and prejudices which induced them to transfer their sectional fighting from the old sod to the land of greater freedom and opportunity. In a locally famous riot in which the Connaughters who were employed at Benton's ferry attacked the Fardowners at Ice's mill and pursued them to Fairmont in an exciting chase punctuated by occasional gun-shots and hideous yells, the law abiding citizens of Fairmont proved themselves equal to the occasion by arresting all accessible assailants, eighty-eight of whom they placed in jail where they had an opportunity to study their first lessons in Americanization.

The approaching railroad encouraged other local activities which furnished other incentives to industry and progress. These included the construction of three turnpikes each begun in 1849—one to Weston another to Beverly and another to Fishing creek. In February 1850 Fairmont people were excited with delight by the first arrival of a steamboat—the *Globe*—resulting in the subsequent arrival of others which began to make regular trips in high water during 1852, and also producing local efforts to secure permanent navigation through organ-

ization of the Monongahela Navigation company* and attempts to interest capitalists—efforts which failed largely through lack of sufficient encouragement from the people of the county. A suspension bridge across the river to Palatine was completed in April 1852. In 1853 a state stock bank was organized.

Rafting on the Monongahela to Pittsburg and lower points which began as early as 1840 continued until about 1890. A few years after the completion of the Baltimore and Ohio in 1852 much lumber cut by portable mills was shipped to Fairmont, Farmington and Mannington.

Westward from Fairmont the railway followed Buffalo creek and at the junction of Pyles creek furnished the stimulus for the creation of another town from a cluster of houses which as early as 1845 had been known at Koontown, in honor of Samuel Koon who built a tavern and a store there. In 1852 the place was renamed Mannington for James Manning, a civil engineer of the new railroad; and in 1856 it was incorporated by the assembly. From 1853 it had a tannery and a good trade in timber products and farm products.

Northwestward from Mannington, the route* continued up Pyles Fork, thence across the divide between Glover Gap and Burton to the upper waters of Fish creek (via Hundred and Littleton and Board Tree Tunnel) and finally across another divide to another stream which it followed from near Cameron to Moundsville. On the site upon which David McConaughey settled in 1846, Cameron began to grow and, by an increasing trade from Wetzel, Greene and Marshall counties, soon became one of the best business points between Grafton and Wheeling.

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*A company was chartered by Virginia in 1847 to slack the Monongahela from the state line to Fairmont. In 1851 it became active in its efforts to obtain subscriptions but failed. Its charter was extended by Virginia in 1853, and the Board of Public Works was authorized to subscribe to its stock as soon as the Pennsylvania company completed slack-water navigation to the state line. Morgantown, in March, 1853, become especially active in soliciting aid, and appointed a committee to institute suit against the Pennsylvania company to compel it to complete its work or forfeit its charter, but the suit was never brought. The charter of the Virginia company was revived in 1858, extending until 1868, the time for completing the work of slacking the river to Fairmont; and again in 1860, authorizing the extension of the work to Clarksburg. At that time the Pennsylvania Navigation Company had completed dams (1844) making the lower Monongahela navigable from Pittsburg to Brownsville, and (by 1856) to New Geneva; but assurances of aid from the Pennsylvania company came to naught, and civil war postponed the subject until the incorporation of the Marion and Monongahela Navigation company in 1863, and the amendment of its charter in February, 1867, so as to allow it to collect tolls on lumber and their freight as soon as one lock and dam should be completed. The project was fruitless as its predecessors and nothing was accomplished until Congress began a policy of appropriations in 1872.

*When the Baltimore and Ohio was completed to Grafton, the company contemplated a route westward from a point near Mannington via Fishing creek to the Ohio and Mr. Hunter who was attorney for the railroad presented a request for a right of way through Tyler county (which then included Wetzel) but the plan was defeated by the vote of John W. Horner of Middlebourn who was influenced by arguments that the trains would scare the game out of the country.

At Roseby's Rock the last rail was laid and the last spike driven on December 24, 1852. The first train from the East rolled into Wheeling on January 1, 1853 and the road was opened to the public on January 10.

Extensive preparations were made for a grand celebration at Wheeling on January 10-12. Over 400 persons including the legislators and executives of both Virginia and Maryland left Baltimore on two trains on January 10 and arrived at Wheeling about midnight on January 11 after a novel trip behind snorting locomotives, and an exciting ride on the frail and temporary switch back railroad over the steep summit above awe-inspiring gorges at Board Tree Tunnel which was not yet completed. The triumphal march, banquet and oratory which the citizens of Wheeling had planned for their guests was postponed until the following day. At six o'clock on the following evening nearly one thousand persons sat at the banquet in Washington Hall.

5. FACILITIES OF TRAVEL AND CONNECTIONS.

To aid in the control of river traffic, by diverting it from Pittsburg to connection with the railway at Wheeling, the company in 1852 chartered a line of boats to run regularly between Wheeling, Cincinnati and Louisville. Soon after the opening of the road the following advertisement appeared in the newspaper:

"The tunnels across the mountains are now completed. Connection with a fine line of steamers from Cincinnati at Wheeling. Leave Wheeling daily at 9 a. m. and arrive at Cumberland (201 miles) at 7 p. m., and allowing two hours there, arrive at Baltimore (380 miles) at 5 a. m. Passengers allowed ample time and opportunity at all points to get their meals. Tickets from Wheeling to Baltimore, $8.50."

For a while after the completion of the railway along Lake Erie from which a good connection was established with Cincinnati, there was a reversal of the current of travel by which the routes to the East via Wheeling and Pittsburg were practically abandoned but these temporary conditions were changed by later events resulting in a return of steady traffic.

Rejoicing over new advantages by which she might be able to maintain her claim in a contest against Pittsburg for the hegemony of the Ohio, Wheeling soon confronted a new cause for grievance in a proposed connection contemplated by the Baltimore and Ohio with the Ohio Central railway four miles below the city at what is now Benwood Junction—a project which induced the people of the city to tear up the tracks of the railway and stimulated the city to secure an injunction against the railway company, which after a long fight was

finally dissolved by the Court of Appeals of Virginia in August 1855. Having subscribed to the Baltimore and Ohio to get its western terminus, Wheeling objected to any change of plans, or to the repeal of any charter restrictions, which would leave her on a mere branch of the road. She was also anxious to prevent diversion through travel from Wheeling to the Parkersburg branch known as the Northwestern. With the hope of securing better communications, she gave hearty support to the Hempfield railway enterprise which was organized by Pennsylvania interests in 1850, incorporated by the Virginia legislature in 1851, begun at Wheeling in 1855 and completed to Washington, Pennsylvania by 1857. At the same time she strenuously opposed the Pittsburg and Steubenville railway* which was chartered by the Pennsylvania interests in 1849 (as a link in a proposed extension to Columbus), begun at Pittsburg in 1852, and thereafter long delayed, first by failure to get permission of Virginia to cross the narrow strip of panhandle, and later by the objection of the restored government of Virginia to the construction of the Steubenville bridge.

6. GRAFTON-PARKERSBURG BRANCH.

Undaunted by previous failures, Parkersburg with the support of a large tributary region continued the fight for a railway. Meantime, always doubtful of the wisdom of establishing the terminus of the road at Wheeling, and still regarding it as an unsatisfactory terminus, the directors of the company felt the necessity of a river terminus at a lower point in order to get an advantage in securing the traffic of the West. To this end the Northwestern Virginia railroad was projected and chartered in 1851 from the main line at Three Forks (Grafton) to the Ohio at Parkersburg.* Although regarded as a domestic corporation which should receive more friendly support than a foreign corporation, it was really constructed under the direction of the Balti-

*This opposition, sustained by the Virginia legislature, caused considerable ill-feeling in Brooke and Hancock counties. As late as 1856 the Washington (Pa.) *Examiner* still referred to the contemplated secession of the upper counties of the panhandle from Virginia, and annexation to Pennsylvania which would thus secure the logical western boundary on the Ohio.

*The Northwestern Virginia was hardly under construction before a movement was started in Philadelphia to save the trade of the Ohio valley to that city. The Hillsborough and Cincinnati road, with which the Baltimore and Ohio expected to connect at Parkersburg became involved in financial difficulties and was absorbed by the Marietta and Cincinnati, which preferred Philadelphia to Baltimore as an outlet for its traffic. By 1954, when the Pennsylvania railway was completed to Pittsburg, a road to connect with it was already projected from Greenburg to Wheeling. In 1854, the legislature of Virginia chartered the Morgantown and Ravenswood railway which was proposed as a link to connect with another road reaching the main line of the Pennsylvania west of Philadelphia. It was thought that this road, striking the Ohio south of Parkersburg, would have a great advantage in getting the trade of the Ohio valley. Most of the money for the proposed enterprise was promised by Philadelphia capitalists. Meetings were held along the proposed route to arrange for stock subscriptions. Like so many enterprises of its kind, however, it remained on the list of roads constructed only on paper.

more and Ohio railway, through B. H Latrobe who was chosen chief engineer of the new line.

Although over three thousand shares of the stock of the new company were held in Parkersburg and along the road to its intersection with the Baltimore and Ohio, one can see back of the project the interests of Baltimore and especially of the Baltimore and Ohio company pushing it to the fullest extent and furnishing the support that made the construction of the line possible. To relieve the embarrassing financial difficulties encountered near its completion, the directors of the Northwestern obtained from the Baltimore and Ohio a loan of $210,000 of its bonds and gave a mortgage on the uncompleted road to secure payment. The road, after its completion (on May 1, 1857), passed to the mangement of the Baltimore and Ohio. Although it had twenty-three tunnels it was one of the best constructed railroads in the country at the time. Along its entire route, especially at Grafton, Clarksburg and Parkersburg it opened the way for a new era of larger opportunity and development. Even at points which did not feel its immediate touch it stimulated efforts to secure better communication* as a basis for new enterprise and industry.

7. THE CELEBRATION.

The opening of the road on June 1, 1857 was simultaneous with the opening of the Marietta and Cincinnati railroad (chartered 1847) and of the Ohio and Mississippi (chartered 1848 and constructed as a six-feet gauge) from Cincinnati to St. Louis. These openings, completing a through route from New York to St. Louis, were enthusiastically observed by the "great railway celebration" of 1857, beginning with a triumphal progress from Baltimore to St. Louis, punctuated by many stops and delays, and enlivened by the "long-winded" speeches of aspiring orators bursting with burning rhetoric which nothing but the shrill shrieks of the starting whistles of the locomotive could control. After a program of feasting and fireworks at St. Louis, and on the return trip, the celebration closed with a Baltimore banquet attended by one thousand persons.

The people of Parkersburg who had made such a long, hard fight to secure a road and therefore felt that they were entitled to recognition, were much disappointed that their town had not been selected as a place for the part of the celebration which was held in Cincinnati. Their dissatisfaction became increasingly serious by the report that the Baltimore and Ohio, which had leased the Northwestern at its

*A projected railway from Williamstown to intersect with the Baltimore and Ohio at Ellensboro, thirty-seven miles east of Parkersburg, was chartered by Virginia; but construction failed from lack of capital.

completion, was diverting Northwestern traffic to the Wheeling route in order to force a failure of the new road so that its stock could be purchased for a trifle. Their complaints gradually died away coincident with the stimulating oil development at Burning Springs and the new excitement which precipitated the civil war.

8. INFLUENCE OF THE ROAD.

The completion of the Baltimore and Ohio railway, the horseless rival of the great Northwestern turnpike which had scorned the possibility of competition, greatly facilitated travel between the Ohio Valley* and the Atlantic coast. Although there were no conveniences such as the sleeping car, the buffet, and the chair car, the people were happy with the new mode of travel which made a trip east a sort of holiday long to be remembered by those who made it for the first time.

Although for many years at least the road was not a financial success if measured by its dividends to stockholders, it was an incalculable success if measured by the salutary effect on the country through which it passed and upon the city of Baltimore which gave it birth. It carried from western Virginia and Maryland great quantities of raw material which were converted into manufactured articles and shipped back for use in reducing the forests and spreading civilization along the route of the great highway. It benefited even the lower reaches of the Ohio by the improvement of transportation facilities, by which Baltimore became a good market for Cincinnati and Louisville. Nor were its benefits economic alone. The parts of country which it touched it bound together into a closer social and political union than had before been realized. It was a large factor in determining the political destiny of West Virginia, the military strategy of the civil war, and the continued integrity of the American Union.

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*The Baltimore and Ohio company no longer looked to the Ohio river for all its traffic. Four years before the Northwestern Virginia was completed a meeting of the engineers of this company and those of the Hillsborough and Cincinnati was held in Parkersburg to discuss plans for a bridge across the Ohio. After considering four sites—Parkersburg, Blannerhassett's Island, Little Hockhocking, and Walker's brick house—the companies decided that the enterprise was too large to undertake at that time. When the road to Parkersburg was finished in 1857 connection with the Ohio road was made by boat to Marietta. Wheeling objected to the construction of a bridge at Parkersburg on the ground that it would obstruct navigation.

VI. Sectionalism: Political and Constitutional Development

1. INTRODUCTION.

West Virginia, the only distinctively mountainous state of the Appalachian region, and the only state whose formation represents a logical conclusion of the sectionalism which existed before the civil war in all the southern states from Pennsylvania southward to Florida, has a constitutional history somewhat unique. Its destiny to form a separate state was largely determined by the flow of its rivers in an opposite direction to the flow of the tidewater rivers, and was foreshadowed in the different political ideas of the West—causing it to give a proportionately larger vote than the East for the ratification of the national constitution in 1788, to oppose the Virginia resolutions of 1798, to antagonize the election of Jefferson in 1801, to favor the American system as a national policy and to advocate the establishment of free schools and the further democratization of social and political institutions. Showing a growing influence in determining the constitutional development of the mother state before the war, and a later determination to fight the mother state in order to preserve the Union, the New Dominion still retains in its constitution many evidences of a surviving sentiment in favor of the institutions of the Old Dominion.

2. A HALF CENTURY UNDER THE CONSTITUTION OF THE REVOLUTION.

The first constitution of Virginia was adopted on June 29, 1776 when there were within the limits of the present state of West Virginia only Hampshire and Berkeley counties and the district of West Augusta. The constitution established an annual general assembly of two houses the members of which were elected by the limited number of people who had the right of suffrage. The house of delegates, the members of which were elected each year, replaced the old house of burgesses and with slight exception* retained the old system of representation: two representatives from each county, and two from the district of West Augusta, (and one each from Williamsburg and Norfolk). The general assembly was authorized to grant to each new

*Jamestown and the college of William and Mary were no longer granted representation.

county which it might create two delegates, and to use its discretion in allowing representation to new towns; but there was a provision for dropping the representation of any town whose population decreased until for seven consecutive years its voting population was less than one-half of a county.

The senate was composed of twenty-four members chosen for a term of four years from twenty-four districts, and was made a rotating body by a provision for the election of six members each year. The apportionment was purely arbitrary and without provision for future reform.

The elective franchise remained as exercised after the law of 1736* and was confined to freeholders who had been in possession of their freehold at least one whole year before the issue of the writ for the election at which they wished to vote.

With the election of the members of the general assembly the voice of the voting population ceased. The governor, treasurer, the eight privy councilmen, the secretary, the attorney-general, and the judges of all the superior courts were chosen by joint ballot of the two houses of the general assembly; the governor and treasurer were chosen annually; the privy council was subject to the removal of two of their number every three years by the "scratch" of the assembly; the secretary, the attorney-general and the judges served during good behavior.

The people had little share in local government. The self-perpetuating county courts had general management of all local affairs. These courts constitutionally appointed the sheriff, the coroner and the clerk of the county; they had the statutory privilege of appointing all other civil officers of the county and all military officers under the grade of brigadier-general, and of laying all taxes for county purposes and of expending them as they saw fit; and, with all these powers, they were responsible to no one for their actions.

The development of West Virginia for the half century after the revolution produced new problems for the Old Dominion. Before the close of the eighteenth century the population in the region now known as West Virginia had begun to grow rapidly. In the Virginia convention of June 2, 1788, which was called to ratify or reject the federal constitution, it was represented by six new counties which had been formed from the district of West Augusta: Monongalia and Ohio in 1776, Greenbrier in 1777, and Harrison, Hardy and Randolph in 1784, 1785 and 1786 respectively. This number of counties had in-

*A freehold was one hundred acres of uncultivated land without a house, twenty-

creased to thirteen in 1800 by the formation of Pendleton in 1787, Kanawha in 1789, Brooke in 1796, Wood in 1798 and Monroe in 1799. These thirteen became sixteen in 1810 by the addition of Jefferson in 1801, Mason in 1804 and Cabell in 1809. To these counties four new ones were added before 1820: Tyler in 1814, Lewis in 1816, Nicholas in 1818 and Preston in 1818. By the end of the next decade a total of twenty-three counties was completed by the formation of Morgan in 1820, Pocahontas in 1821 and Logan in 1824. The white population had increased from 50,593 in 1790 to 70,894 in 1800, to 93,355 in 1810, to 120,236 in 1820, and to 157,084 in 1830.

During these years, and partly as a result of changing conditions, the defects in the constitution became very marked. These defects were early noticed by Jefferson who desired a state constitutional convention to remedy them. Commenting on the constitution, in 1872, he wrote: "The majority of the men in the state who pay and fight for its support are unrepresented in the legislature—the roll of freeholders entitled to vote not including generally the half of those on the roll of the militia or of the tax gatherers. Among those who share the representation the shares are unequal." To show some of the inequalities which existed even at that early date between the four sections of the state from the coast to the Ohio he prepared the following table:

	Fighting men	Delegates	Senators
East of river falls	19,012	71	12
Falls to Blue Ridge	18,828	46	8
Blue Ridge to Alleghenies	7,673	16	2
Trans-Allegheny	4,458	16	2

The inequality of the county system of representation is well shown by a comparison of the counties. In 1800, Warwick with a white population of 614 had two members in the house of delegates while at the same time Berkeley with a white population of 17,832 had but two members in the lower house. The inequality was equally noticeable in the senate. In 1815, the entire West with a free white population of about 233,469, or two-fifths that of the state, was represented by four senators; and, at the same time the East containing the other three-fifths of the white population, 342,781, was represented by twenty senators.

Several attempts to secure ajustment were unsuccessful. In the house of delegates, in the May session of the assembly of 1784, a petition from Augusta county asking for a constitutional convention was the subject of a two days debate; and, although Madison strongly

advocated it, a bill for a convention failed—largely through the violent opposition of Patrick Henry.

After 1790, petitions praying for a reform in representation and suffrage were presented at almost every session of the assembly. From the counties of Patrick and Henry these petitions were expected regularly at the commencement of each session. In the session of 1806, a bill for submitting to the people the proposition to call a constitutional convention passed the house but was indefinitely postponed in the senate through the influence of prudent men who feared the political bitterness of the times.

In 1814, a constitutional reform bill which provided for extension of suffrage, reapportionment of representation, and the reduction of the total number composing the house of delegates, was rejected in the house by a slight majority. The next year, a bill was introduced into the house providing for a rearrangement of the senatorial districts on a white basis. The fight was largely sectional.* The western members unsuccessfully urged the passage of the bill. Eastern constitutional lawyers in the house held that the districts, created by the same power that made the constitution, could be altered only by a constitutional convention. This doctrine the westerners then determined to put into practice. On August 19, 1816, a convention composed of representatives from thirty-six counties (twenty-four of which were from the region west of the Blue Ridge) met at Staunton and sent a memorial to the general assembly requesting the passage of a bill for submitting to the people the question of calling a constitutional convention. Though the house was successful in securing the passage of a bill calling a convention to change the constitution by amendments which would extend the right of suffrage, equalize the land tax, and equalize representation on the basis of the white population, its program for securing a convention and larger western representation was frustrated in the senate. Then the legislature, reversing the doctrine held by the constitutional lawyers in 1815 passed a bill equalizing the senatorial districts according to the white population of the old census of 1810 which no longer represented the true population of the West. By this reapportionment, the West got nine instead of four senators, while the number from the East was reduced from twenty to fifteen.

*In 1816 there was a proposition, previously suggested as early as 1796, that the state should be divided into northern and southern Virginia by a line of the Rappanhannock, thence to the junction of the Greenbrier with the New and down the Kanawha to the Ohio. Winchester was suggested as the capital of the proposed new state.

Though for a time public agitation ceased, by 1824* the equalization of representatives in the house of delegates on the white basis became the subject of newspaper controversy and general discussion which resulted in a second meeting at Staunton, on July 25, 1825, attended by upwards of one hundred friends of reform. This convention passed resolutions in favor of several reforms: representation in the house according to white population; the reduction of the total number of delegates in the house; the extension of the right of suffrage; the abolition of the executive council, and a more responsible executive. These resolutions, forwarded to the general assembly, in the three following sessions were the subject of discussions which finally (in January, 1828) resulted in the passage of a bill for submitting the question of a constitutional convention to a vote of the freeholders. The election returns showed that the convention was favored by the almost unanimous vote of the West and opposed by over one-half of the vote of the East.

The inhabitants of this sparsely settled region of western Virginia by 1829 looked with chagrin upon the emigrant wagons which passed over the Cumberland road and down the Kanawha to the more prosperous trans-Ohio West—and some oined the caravans and moved on into the farthest West, while others remained to fight the battles of reform in spite of retarded development, due to the inefficiency of the state as an agent for internal improvement.

3. THE CONSTITUTIONAL CONVENTION OF 1829-30.

The convention which met at Richmond on October 5, 1829, was an august assemblage composed of ninety-six of the most prominent men of the state (four members from each senatorial district)—eighteen of whom were from counties within the present limits of West Virginia. Its dominating spirit of sectionalism was largely due to the geographic and economic conditions which for years the defects of the old constitution had aggravated. The two sections agreed on the acceptance of the bill of rights; but, with their radically divergent ideas, they clashed on the practical application of the principles of government.

Practically all the time of the convention (October 5, 1829 to January 15, 1830, was consumed by debates on two questions: representation and suffrage. On the question of suffrage the thirty-six

*In 1823 a popular movement on the Potomac and in the northwest to encourage internal improvement by the federal government led to the surrender of the rights and interests of the Po tomac company, and to the incorporation of the Chesapeake and Ohio canal company by an act of the Virginia assembly which at the time showed a disposition to abandon the internal improvements on the James and the Kanawha rivers.

delegates from the district west of the mountains stood solidly for white population as the basis for both houses, in opposition to the East which favored a representation based on white population and taxation combined. Madison, Marshall and Monroe defended the property basis on the ground that the state was the conservator of property. In the debates, when the eastern members demanded reasons, based on facts and conditions, for what they termed "the most crying injustice ever attempted in any land" against property rights, the westerners continued to cite the bill of rights and the abstractions of Jefferson. In answer to the statement that nearly three-fourths of the tax had been paid by the counties east of the Blue Ridge, the West asked who were the men who had fought the battles. When Judge Upshur from the Eastern Shore, in a speech lasting the greater part of two days, endeavored to show that the law of the majority came from no source—not from the law of nature, nor from the exigencies of society, nor from the nature and necessity of government, nor from any constitutional source—Philip Doddridge of Brooke answered him by asking: If the majority are not possessed of the right or power to govern, "whence does the gentleman derive the power in question to the minority?" When Randolph, in a high key, exclaimed that if he were not too old to move he would never live under King Numbers, Campbell from the Ohio extolled King Numbers as the most dignified personage under the canopy of heaven. During the debate the white laboring farmers in the western part of the state were designated "peasants" holding the same place in political economy as the slaves of the tide-water East. There were reports that the western members would secede from the convention. To allay sectional feeling Monroe urged mutual concessions and suggested a white basis for the house and a mixed basis for the senate.

Thus the debate continued until finally a plan of apportionment by districts, based on no principle and opposed by the West, was adopted.

The extension of suffrage was most strongly advocated by the western people who quoted Jefferson in favor of free manhood suffrage, but who were promptly notified by Randolph that the East was "not to be struck down with the authority of Mr. Jefferson!" At this time, in Virginia (the only state of the twenty-four in the Union which still adhered strictly to freehold suffrage), in a total of 143,000 free white males there were 100,000 free white citizens paying taxes to the state—of which about 40,000 were freeholders and 60,000 were men who owned personal property.

Having failed in the effort for manhood suffrage, the West fought

vigorously, but unsuccessfully, to extend the suffrage at least to tax payers. Several easterners, arguing that much of the land in the West, fit only for a lair of wild beasts, was not worth a mill per acre and would never be of any value, were determined to draw the line of suffrage restriction even closer by fixing a minimum value for a freehold. Throughout the East the feeling was pretty general that there should be some local attachment. Monroe said that the elective franchise should be confined to an interest on the land, and Randolph approvingly agreed that "terra firma" was the only safe ground in the commonwealth on which the right of suffrage could stand. "The moment you quit the land," said he, "you find yourself at sea without a compass, without landmarks, or polar star."

The convention finally agreed to lessen the requirements of a freehold, and to extend the suffrage to leaseholders and housekeepers who paid taxes.

Philip Doddridge, typifying the western democratic sentiment moved that the executive, unhampered by a council, should be elected by the people and responsible to them. Although at that time eighteen states elected their governors by popular vote, his motion was lost. Mr. Naylor of Hampshire proposed that the office of sheriff should be filled by the people instead of by the county court whose members were accustomed to give this office to themselves in rotation, the one receiving it selling it at public auction to the highest bidder; but this recommendation met the formidable and successful opposition of men as influential as Giles and Leigh who thought such an innovation would disturb the county court system which to them was "the most valuable part of the constitution." In the convention there seemed to be an abhorrence of overlegislation and to remedy this Mr. George of Tazewell proposed that the assembly should meet but once in two years. The motion was lost, many perhaps feeling with Randolph that as the legislature of the United States met every year the Virginia assembly should meet annually also in order to watch it. Resolutions submitted by western members, looking toward the encouragement of public education, were opposed by eastern men, some of whom feared the adoption of a system by which the people of the East would be taxed for the education of the children of the West. Nor did the West, after failing to realize so many of its longed for reforms, have any prospect of realizing them in the early future. The proposition that there should be a constitutional provision for amendment received but twenty-five votes. In opposing this proposition John Randolph declared that he would as soon think of introducing

a provision of divorce in a marriage contract; and although he was strongly against the constitution, he exclaimed: "If we are to have it, let us not have it with the death warrant on its very face."

The completed constitution, a precedent for all later constitutions of the South before 1860, provided for several minor reforms. Under it the number of delegates was reduced from 214 to 134 (not to exceed 150), the county system of representation was abolished and representatives were apportioned according to districts—which were so arranged that the apportionment was more nearly in accord with the respective population of the counties. Thirty-one of the representatives were assigned to the twenty-six counties west of the Alleghenies. Of these thirty-one, the twenty-three counties now in West Virginia were given twenty-nine. However, as no reapportionment could be made before 1841, and then not unless two-thirds of the assembly agreed, and since the East had a large majority in the legislature, the chances for a reapportionment were small. An age qualification of twenty-five years was added to the qualifications of delegates. The number of senators was increased from twenty-four to thirty-two, not to exceed thirty-six. The state was divided into two great senatorial districts separated by the Blue Ridge. The western district which contained the larger number of electors was given only thirteen members while the eastern district was given nineteen. The age qualification for senators was changed from twenty-five to thirty years. The right of suffrage was extended to all white male citizens twenty-one years of age who were qualified to vote under the old constitution and laws,* to all who possessed a $25 freehold, a $25 joint tenantship, a $50 reversion, a five-year leasehold of an annual rental value of $20, and to all tax-paying housekeepers who were heads of families; but the right was granted in terms the interpretation of which proved very difficult. There was a provision for the *viva voce* vote—characteristic of the South.

The term of the executive was increased to three years and he was ineligible for the next three years. Contrary to the constitution of 1776, which had left all qualifications of the executive to the general assembly, the new constitution contained several provisions requiring that the executive must be thirty years of age, a native citizen of the United States, or a citizen at the time the federal government was established, and a citizen of Virginia for five years next preceding his election. The executive council was a rotary body con-

*The law of 1785 defined a freehold as twenty-five acres of improved or fifty acres of unimproved land.

sisting of three instead of eight members chosen by the assembly, and the senior councilman was authorized to act as lieutenant governor.

This constitution, submitted to the people, in April, 1830, was ratified by a vote of 26,055 to 15,563. The vote within the bounds of West Virginia stood 1,383 for ratification and 8,365 against it.*

Naturally, the constitution of 1830 worked unfavorably for the West. The vast resources of West Virginia—forests of excellent timber, oil and natural gas, and 16,000 square miles of bituminous coal in workable seams—remained undeveloped because of the short sightedness of eastern leaders. The West with no railroads and no canals, solely needed improvements; but despite much public agitation and vigorous struggles in the general assembly, it had to remain content with paltry appropriations for turnpikes, obtained by log rolling, while vast sums were spent on badly managed improvements which were undertaken in the East* Under this constitution the present territory of West Virginia received no public buildings, had no representatives in the United States senate and had no opportunity to furnish the governor for the state before the appointment of Joseph Johnson in 1850.

Under these conditions it is not surprising that equal representation on the white basis continued to be the Western cry; but, after the indefinite postponement of the subject by the legislature, which had the power to reapportion the state after 1841, Westerners, with sectional feeling more pronounced,** finally settled into a firm determi-

*The trans-Alleghenny region refused to be reconciled to the constitution of 1829 and continued to talk dismemberment. A writer in the Wheeling Gazette of April, 1830, suggested that a convention in the West should be called to appoint commissioners "to treat with the eastern nabobs for a division of the state—peacably if we can, forcibly if we must." A series of essays appearing in many western papers urged that dismemberment alone could bring relief to the West. On October 1, 1830, citizens of Wheeling called a mass meeting to consider the expediency of measures to annex northwestern Virginia to Maryland (north of a line from the mouth of the Little Kanawha to Fairfax stone.) The *Winchester Republican* suggested that Virginia should let the disaffected population of the northwest go, and suggested that the southwest, deprived of its northern allies, would give up its desire for separation if the desired improvements in the southwest should be completed. Thomas L. Lees of New Jersey, president of Linsley Institute, in some notes of 1831, wrote: "That part of Virginia which borders on the Ohio is rapidly improving in wealth and population; its inhabitants have long been dissatisfied with the selfish policy and the usurpations of the eastern slave holders, whose influence in the legislative body has ever been exerted in the perpetration of an oppressive aristocracy. The people here are very different from those of the eastern part of the state. Industry is much more encouraged and respected; slavery is unpopular, and the few who hold slaves generally treat them well. The time is not far distant when Western Virginia will either liberalize the present state government, or separate itself entirely from the Old Dominion."

*Owning to conflicting reports in regard to the relative merits of railways and canals, Virginia in 1832 surrendered its interest in the James River Canal company to a joint company (the James River and Kanawha company) which was empowered to continue the work to the Ohio either by a railroad or a canal or by a combination of both. The work of the new company was postponed by lack of capital and the inability to secure it from the banks. In the meantime, the management of the Chesapeake and Ohio canal had incurred the displeasure of the federal administration, and its president was removed through the influence of Jackson.

**Naturally, the west continued its fight for a greater share in the government. In 1842 talk of dismemberment was current in a meeting of delegates from ten counties held at Clarksburg. The *Kanawha Republican* proposed a new state, "Appalachia."

nation to endure the evils of the constitution until after the census of 1850, satisfied that the excess of white population west of the mountains would be so great that the East could no longer with any show of justice refuse them their proper share in the general assembly.

The basis of representation was the most prominent question between the two sections. The Easterners, who affirmed not very reverently that to the white basis they could not and would not yield, gradually advocated many of the reforms which had so startled them when proposed by Western members in the convention of 1829-30. They became willing to extend the suffrage to every free white man over twenty-one, allowing him to vote once where he resided and no where else; they favored a reform of the county court and the judicial system, the election of the governor by the people, and a more rigid accountability of all the governmental departments. Through their newspapers, and through the governors' messages, they urged a constitutional convention to bring about these reforms. On the other hand the westerners, who had favored these reforms for years, were unwilling to vote for a convention which was not organized on the white basis and which did not promise to equalize representation.

In the legislature, the West was again defeated by the passage of a convention bill that adopted for the convention a mixed basis which gave the East a majority of seventeen in the convention (the white basis would have given the West a majority of thirteen). In the Western papers this defeat was attributed to the votes of Western members who were anxious to secure a convention on any basis. The feeling in the trans-Allegheny region, however, was strongly against "that abominable convention bill" as it was called in the Parkersburg *Gazette*, and the people were urged to repudiate those traitors to the interests of the West and to republican principles, who had voted for the bill with no provision for a white basis. Anti-convention meetings were held in many of the counties and the people were advised to vote against the convention. The Parkersburg *Gazette*, exhorting the West to present an unbroken front in opposition to the Eastern scheme to avoid the reform most needed, said that it would then remain to be seen whether the East would have the temerity to stake the integrity of Virginia upon her dogma of "might makes right." At the April elections, although the majority vote was in favor of the convention, most of the trans-Allegheny counties voted against it.

In the August elections for selecting delegates to the convention the basis question was the issue. Not a member elected from the West favored the mixed basis and not a member elected from the East ex-

cept Henry A. Wise opposed it. Of the 135 members elected 34 were from the present state of West Virginia.

4. THE CONSTITUTION OF 1850.

The convention which met October 14, 1850, and adjourned November 4, to await census data, reconvened on January 6, 1851. On February 6, the committee on basis and apportionment having found itself equally divided in opinion, submitted two reports. The one, favored not only by the Western members of the committee but by every Western delegate, advocated the white population as the basis for the apportionment of both houses; the other, having the almost equally unanimous support of the East, advocated white population and taxes combined as a basis for both houses (so that every seventy cents of taxes would have a representation equal to one white person.) Every day* from February 17 to May 10, in committee of the whole, the convention discussed the reports of this committee and the various substitutes; but no conclusion was reached. The East had the power to adopt its basis, but feared that if it should do so the West would secede from the convention. Each side clung to its demands with bulldog tenacity. Feeling was so high that on May 10 the convention was forced to adjourn until the following day. Then a compromise committee was appointed to prevent a split.* Finally, the West, unflinchingly refusing to consider any compromise which did not eventually provide for the white basis or for submitting the basis question to the people, partially gained its point. In the plan adopted the apportionment for the house of delegates was based on the white population according to the census of 1850 (giving to the West eighty-three delegates and to the East sixty-nine). The apportionment in the senate was arbitrarily fixed giving thirty to the East and twenty to the West, but in the plan there was a provision that either the legislature should make a reapportionment on the white basis in 1865 or the governor should submit the basis question to the people. Any qualified voter of twenty-five years of age, except a minister of the gospel, or an officer of a banking corporation, or an attorney for the commonwealth, was eligible for election to the general assembly. The delegates were elected biennially; half of the senators were elected every two years, and served for four years.

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*One session a day proved insufficient for the discussions. The reporter struck for higher wages, and the members enamored with their own verbocity agreed to his demands.

*Various plans of compromise were proposed but the West declined any compromise until finally Mr. Chilton of Fauquier came forward with a modified committee report.

With the amicable settlement of the question which for so many years had been the great disturbing element, the convention was free to express that democratic spirit of the times which had been gradually breaking down old barriers, and which Virginia had not been able to resist as is shown by the work of the legislature of 1849 which abolished imprisonment for debt and granted to women the right to make a will.

The provision extending suffrage to every white male over twenty-one, two years resident in the state and twelve months in the district where he votes, not only greatly enlarged the number enjoying the elective franchise but abolished the crying abuse of double and treble voting. A man, who before could vote in every district in which he held real or pretended property which he could reach by fast driving or riding on election day, could now vote only in the district in which he resided. Although the method of voting was still *viva voce,* dumb persons were permitted the use of the ballot—a provision which was evidently suggested by the precedent in the Kentucky constitution of 1850.

The executive council was abolished, the judicial system reformed, and the county court reorganized. The governor, lieutenant governor, for a term of four years), the twenty-one circuit judges (for a term of eight years), the five judges of the court of appeals (for a term of twelve years) and all local officers—the justices of the peace and attorney for the commonwealth (for a term of four years), the clerk of the court and the surveyor (for a term of six years) and the sheriff and commissioners (for a term of two years)—were elected by the people. Provision was made for the payment of jurors, who previously had been chosen from the loungers within reach of the sheriff's voice the day the court opened and who had served without compensation.

The spirit of the times was also reflected in restrictions on the legislature, both houses of which were now for the first time given equal power of legislation. The general demand throughout the United States for less frequent sessions of the legislature was reflected in the provision that the general assembly should meet once in two years for no longer than ninety days, which, however, might be extended for thirty days by the concurrence of three-fifths of the members. To the old restrictions of 1829—relating to *habeas corpus,* bill of attainder, *ex post facto* laws, impairing the obligation of contracts, freedom of speech and press, and religious freedom—were added several additional restrictions. The general assembly was forbidden to pledge

the state for debts or obligations of any company or corporation, to grant charters of incorporation to any religious body, to authorize lotteries or to grant divorces,* to change names of persons or direct the sale of the estates of persons under legal disabilities. The attitude of the recently admitted states was reflected in the provision prohibiting the legislature to form a new county of less than 600 square miles or to reduce an old county to a lower limit. One restriction, reflecting a phase of the slavery question, forbade the assembly to emancipate any slave or descendant of a slave.

The constitution declared that taxation should be equal and uniform and that all property other than slave should be taxed according to its value. All the resolutions, substitutions and efforts of western members failed to keep this exception out of the constitution. On every slave over twelve years of age was assessed a tax equal to that assessed on land of the value of $300. Slaves under twelve were not taxed. A majority vote of those elected to the assembly might exempt other taxable property from taxation. A capitation tax equal to the tax on land of the value of $200 was levied on every white male inhabitant of twenty-one. One equal moiety of this white capitation tax was applied to the purposes of education in primary and free schools. Many in the convention would have been delighted to have had a provision for a permanent system of schools incorporated in the constitution, but Virginia was not yet ready for that.* As in Michigan the same year, the constitution provided for a sinking fund by directing the legislature to set aside seven per cent of the state debt existing on January 1, 1851.

The constitution was ratified in October, 1851, by a vote of 75,748 to 11,063. The only counties giving majorities against the constitution were five eastern counties.

In his speech at the close of the convention of 1851, after exhorting the members on their return to their constituents to exert all their influence to allay sectional strife and to promote a cordial fraternal feeling among the people of their beloved commonwealth, President Mason said: "Virginia united has ever been one of the noblest states of the confederacy. I cannot contemplate what she would be if torn by intestine feuds or if frantically seeking her own dissolution. May

*The general assembly granted two divorces from 1829 to 1831 and thirty-seven from 1849 to 1851.

*With the coming of New Englanders and other "foreigners," the free schools became a subject of great concern. The West continued to oppose the demands of the state university, and of various colleges and academies, for greater participation in the benefits of the literary fund.

you long live to see this ancient commonwealth united and happy at home, honored and respected abroad."

In spite of Mason's parting injunction, the rift between the East and the West continued to widen in the decade of political agitation which followed. The fierce controversy over slavery was driving the North and South farther and farther apart; and neither the President, nor Congress, nor the Supreme Court could suggest any middle ground which would satisfy both. Under the administration of Wise, the political hero of the West, efforts were made to conciliate the West and thereby to endeavor to bridge the chasm between sections. The West was exhorted to send her children to Virginian schools taught by Virginians, and various schemes for railroads and canals to connect the West and the East were proposed.* The interests of West Virginia, however, with less than four per cent of her population slave, were those of a northern state. Her sons continued to attend schools in free states rather than the schools across the Blue ridge. Her markets were in Pittsburg, Baltimore and the Mississippi river towns rather than in Norfolk. Her geographic conditions allied her interests with those of Pennsylvania and Ohio and her industries were those which called for white rather than slave labor. Her natural

*After 1851 the scheme of connecting the western terminus of the James river canal with the Ohio river by a railroad was undertaken at state expense, and from 1850 to 1854 various turnpikes and railroad companies were incorporated with the privilege of constructing works of internal improvement in the West. Very liberal appropriations were also made to the western turnpike companies. In 1854 at a convention which met at White Sulphur Springs to consider internal improvements, the extension of the Covington and Ohio was urged as a measure to encourage direct trade with Europe, to free Virginia from the thraldom of northern monopoly, to unite her eastern and western interests and to enable her to get control of part of the commerce which was being diverted from the Ohio and the Mississippi to the northern cities of the East. The internal improvement legislation during the Wise administration was determined largely by a program for a United South. Hence the cherished scheme for completing the Covington and Ohio railroad to connect the James and Ohio rivers as a defensive measure, to tap the granaries of the Union and to divert the mineral resources of the mountains to Richmond.

Under the intensified general belief that dismemberment of the Union was inevitable, the assembly of 1857-58 made liberal appropriations for completing the Chesapeake and Ohio railroad and incorporated numerous companies to build branches thereto. At the same time William B. Preston was sent to France as the agent of Virginia to negotiate for the establishment of a steamship line between Norfolk and Nantes.

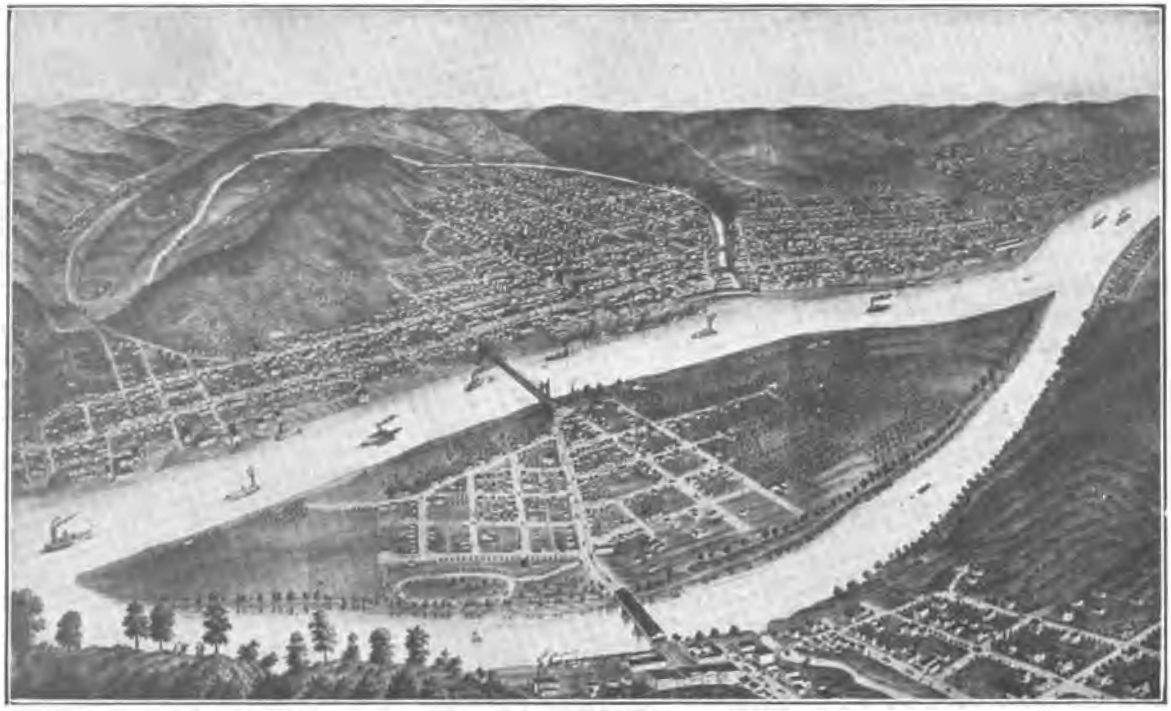
The assembly of 1859-60 guaranteed the debt of the James river and Kanawha company, vested the entire control of the management in the stock holders, and authorized the company to borrow $2,500,000 to be used in continuing the canal. This action was partly due to the movement for a steamship line between Virginia and France and negotiations of C. J. Faulkner with certain French parties for the purchase by them of the rights and privileges of the James river and Kanawha company. The Bellot company of Bordeaux and several parties associated with them had become interested in the "Swan lands" which the assembly had relieved from the penalty of a forfeiture and vested in John Peter Dumas to hold in trust for the heirs and creditors of Colonel Swan, an officer of the American revolutionary army. In 1859, M. Bellot and the directors of the James river and Kanawha canal company entered into an agreement for the sale of the company's property to certain French parties, and for the creation of a new company, the Virginia Canal company, with a capital stock of not less than $20,000,000. This new company was to complete a continuous waterway to the Ohio within a specified time. Governor Wise made these French negotiations a prominent reason for calling into extra session the assembly which took the initial step to secession on the part of Virginia.

destiny and future loyalty to the Union, and opposition to secession, was clearly forecasted by Webster in his speech at the laying of the corner stone of the addition to the capital at Washington (in 1851). "And ye men of Western Virginia who occupy the slope from the Alleghenies to the Ohio and Kentucky," said he, "what benefit do you propose to yourself by disunion? If you secede what do you secede from and what do you secede to? Do you look for the current of the Ohio to change and bring you and your commerce to the waters of Eastern rivers? What man can suppose that you would remain a part and parcel of Virginia a month after Virginia had ceased to be part and parcel of the United States."*

*Early in 1860, Isaac N. Smith of Kanawha, speaking in the house of delegates on the Covington and Ohio railroad bill said: "As the lineal descendent of the first white man who planted his home in the wilderness of the Kanawha valley * * * I stand here to say that when Virginia forces the necessity upon us, we can and will fight our battles, without help from those who would refuse it now."

1. A. W. Campbell
2. John S. Carlile
3. W. T. Willey
4. Francis H. Pierpont
5. Arthur I. Boreman
6. Chester D. Hubbard
7. James H. Brown
8. James C. McGrew
9. Jacob B. Blair
10. W. E. Stevenson
11. Daniel Lamb
12. Peter G. Van Winkle

Founders of West Virginia.



BIRDSEYE VIEW OF WHEELING, 1861.

From a sketch made on the hills on the Ohio side of the river. The oval, which appears in the foreground of the island, represents the Northwestern Virginia Fair Association and was known as Camp Carlile during the war.

VII. Formation of the New State

1. SECESSION CONVENTION.

Ten years after Webster's significant utterance of 1851 the people of western Virginia found the occasion which furnished the opportunity for separation from the mother state. The secession of South Carolina and the other cotton states precipitated a crisis in which Virginia hesitated to act. Governor Letcher called an extra session of the legislature which met January 7, 1861 to determine "calmly and wisely what ought to be done." This session authorized an election (on February 4) to choose delegates to a convention to determine the policy of Virginia in the impending crisis. In the West, in most of the counties, meetings were held vigorously protesting against any convention to consider federal relations, and condemning the act of the legislature which had called such a convention without previously submitting the question to the people.*

In the convention which met February 14 and remained in continuous session until May 1, special commissioners sent from Georgia, Mississippi and South Carolina urged secession. The secessionists strained every nerve to get the passage of the ordinance and gradually won over Union members. Although the convention hesitated for a time after the news of the fall of Fort Sumter it was induced by excited leaders to cast the lot of Virginia with the Confederacy. The decisive step was finally taken on April 17, largely through the dramatic speech of Wise who spoke with watch in hand, pistol in front of him, his hair bristling and disheveled, and his eye standing out with the glare of excitement. The ordinance of secession was passed by a vote of 88 to 55. The vote of western members stood 32 to 11 against it (4 not voting).

Neither unionists nor secessionists waited for the popular vote on the ordinance which the convention provided should be taken May 23, the date for the regular election of members to the general assembly. The secessionists seized the arsenal at Harpers Ferry, and the custom-houses at Richmond, Norfolk and Portsmouth, and put

*There was a remarkable contest in Mercer county over the election of a delegate to the secession convention. The majority of the people of the county were strongly union. The contest was between brothers, W. H. and Napoleon B. French, both of whom had been Whigs until a short time before the election when W. H. left the Whig party and joined the Democrat party. At the time of the election, Napoleon B. was serving in the Virginia legislature as a senator from the district of which Mercer was a part. He won by a majority of over 300.

Virginia under the control of the Confederacy as if she had already become one of its members.

2. FIRST WHEELING CONVENTION.

The West, deserted by Wise, its leader of the decade before, and seeking wiser leaders for the future, was soon largely under the general direction of John S. Carlile after his safe return from the Richmond convention. A meeting* held at Clarksburg on April 22, urgently recommended that each county of northwestern Virginia should send at least five men to Wheeling on May 13 to determine what action should be taken in the emergency. In response to this recommendation, on the day appointed, over 400 men, pursued in some instances by confederate troops, flocked to Wheeling where amid great demonstrations, flags and banners flying, bands playing and people cheering, they assembled as a "mass convention" in Washington Hall, and promptly organized with all the machinery of a parliamentary body. The members of this irregular convention, although they agreed upon the necessity of separation from Virginia and the formation of the new state, were divided on the question of what should be done first. Their conflicting ideas and plans were disclosed in a torrent of resolutions. Many, led by Carlile, insisted on the immediate formation of a new state by the simple edict of the convention without the delay and inconvenience which would result from adherence to constitutional provisions. The Wood county delegation carried a banner which bore the inscription "New Virginia, now or never." Others, led by W. T. Willey, were opposed to immediate action, feeling that the time called for thoughtful, guarded deliberation. They declared the execution of Carlile's plan would be "triple treason"—treason against the state, against the United States, and against the Confederacy if it should succeed in maintaining itself. After a debate which lasted for three days, the "mass convention" changed its mind on the Carlile plan, but reached the same object in another way. Hon. F. H. Pierpont came forward with some resolutions which were in the nature of a substitute for the Carlile plan, providing for a new convention to which delegates should be regularly chosen by all the loyal counties and which should devise

*Similar meetings were held in a number of counties. One of the earliest meetings was held at Morgantown, the home of Hon. W. T. Willey who had arrived fresh from the Richmond convention. The temper of the citizens of this locality expressed at this meeting was representative of the prevailing sentiment throughout the western section. Commending the firmness of western delegates in resisting the plans for disunion, they entered a solemn protest against the secession of Virginia, denounced such action as treason against the government of the United States, and declared that they would not follow Virginia, but would dissolve their civil and political relations with the East.

such measures as the welfare of the people of the northwestern counties should demand. This proposition left the question and method of separation from the old state to be determined by the new convention itself. This proposition met with the approval of the convention, and it made a call upon all the western counties disposed to cooperate to send delegates to the new convention. Delegating the execution of the plan to a well-chosen executive committee, this remarkable and historic convention adjourned amidst a blaze of enthusiasm accompanied by the singing of "The Star Spangled Banner." The recommendation of the committee that (if the ordinance of secession should be ratified on May 23) there should be an election on June 4 to select delegates to a new convention to reorganize the government, was put into operation.

3. SECOND WHEELING CONVENTION.

On June 11 seventy-seven representatives from thirty-nine counties assembled at Wheeling. Two schemes were presented: that of immediately forming a new state out of the counties represented in the convention, after the Carlile plan; and the other of reorganizing the Virginia state government and assuming that these counties represented in the convention were the state. The majority of the convention soon shifted to the support of the proposition for reorganizing the Virginia government out of the loyal counties, vacating the offices and taking possession of the whole machinery under the name of the government of Virginia. By this method they controlled a state already recognized, and quite sure of the recognition of the Federal government in preference to that purporting to be the government of Virginia at the city of Richmond. The state of Virginia could be legally dismembered only by its own consent. If the people west of the mountains were the state, they could easily get the consent for division. To this end, the convention adopted with great unanimity, and promulgated, an address or declaration of their motives and purposes, and a statement of the grievances which impelled them to this course. They framed and passed, without a dissenting vote, an ordinance which set forth in detail the scheme of the convention for reorganizing the state of Virginia: the appointment of a governor, lieutenant-governor, and attorney-general to continue in office for six months; the requirement of a test oath of all officers then serving under the Virginia government with a provision authorizing the governor to appoint successors to all incumbents who refused to take the oath; and an early meeting of the legislature to

provide for a speedy general election to fill all the offices of the government. Under this scheme, the convention elected Francis H. Pierpont, governor, Daniel Polsley, lieutenant-governor, and James S. Wheat, attorney-general.

The convention then formally declared all ordinances, acts, orders, resolutions and other proceedings of the Richmond convention illegal, inoperative, null and void. With a view of taking up in earnest the work of erecting a new state, the convention adjourned on June 25 to reconvene at the same place on August 6 following. At this time the people of western Virginia were without a judiciary, without sheriffs and without legal protection of life, liberty and property.

In pursuance of the ordinance of the June convention, the first legislature under the reorganized government of Virginia met at Wheeling on July 1, 1861. Governor Pierpont sent an elaborate message, among other things informing the legislature that he had communicated to the President of the United States the purposes and acts of the convention and the people of the northwest counties in endeavoring to preserve the state of Virginia to the Union, and had received his assurance that they should have such assistance from the Federal government as could be given under the authority of the constitution.

On July 9, the legislature of the two houses proceeded to complete the organization of the government by filling the offices that were vacant. After appointing various state officers, it proceeded to choose successors to R. M. T. Hunter and James M. Mason who had vacated their seats in the United States senate and were engaged in the effort to overthrow the Federal government. To fill these vacancies it elected Waitman T. Willey and John S. Carlile who proceeded to Washington, presented their credentials from the Virginia government at Wheeling, and were duly admitted by the United States senate as senators from Virginia.

The convention reassembled on August 6 and after much discussion concerning the legality of such an act, on August 20 passed an ordinance providing for the formation of a new state and adjourned on August 21. On October 24, the people living within the boundaries of the proposed state ratified the ordinance by a vote of 18,408 to 781; and, at the same time, elected delegates to a constitutional convention which met at Wheeling on November 26, 1861.

On May 13, 1862, the legislature of the restored government passed an act giving the formal consent of Virginia to the erection of a new state out of her territory. This territory included forty-eight coun-

ties of northwestern Virginia and made provision for including three more—Jefferson, Berkeley and Frederick—when they should vote to come in. The first two subsequently voted in favor of the proposition, but the county of Frederick never voted on it. The assent of these fifty counties by a formal vote to the formation of a new state led to steps preparatory to the formation of a constitution of the new state.

4. THE FIRST CONSTITUTION.

The constitution framed by the Wheeling convention was far better than the prejudices of many of the members as reflected in the debates might have indicated.* Unfortunately there was no official provision for the publication of the debates. Perhaps the reasons for this neglect are reflected in the remarks of three of the members. Chapman J. Stuart, representing Doddridge county, speaking without historical foresight, said in the convention that to publish the debates which no one would ever read would be an unnecessary expense. James H. Brown of Kanawha, untrained in historical perspective, said that after the vital point, the success and excellence of the constitution, had been secured, the debates by which it had been attained were "immaterial and unimportant." Hall, a stickler for impromptu and informal discussion, opposed publication because he feared it would lead to "set speeches."

The name selected for the new state was not the only one proposed. The name Kanawha which had been used in the ordinance for the formation of the state was rejected—probably because there was already in the state a county and a river by that name. Mr. Willey said that some of his constituents along the Monongahela thought that Kanawha was too hard to spell. There was objection also to the name of West Virginia. Many felt that as immigrants held the name Virginia in disrepute thousands believing that the Virginian policy still prevailed and would be kept away if that name were retained. Others feared that the soubriquet "west" would disgrace the new state in comparison with Virginia. The question was nally settled however by the sentiment of those who had long lived in the old Dominion and who revered the memories of its most honored citizens.**

The question of boundaries was a source of considerable debate.

*The stenographic notes of the debates, made by an assistant clerk of the convention, Granville D. Hall, are in manuscript in the department of archives and history at Charleston. Upon these notes much of this narrative of the convention is based.

**Harmon Sinsel, the eccentric member from Pruntytown was in favor of Virginia as part of the name because it reminded him of the Virgin Mary.

On the day that the convention assembled, the Wheeling *Intelligencer* urged that the people wanted a homogeneous state. Such they could not have by including the eastern valley where, contrary to conditions in northwestern Virginia, negroes were the staple, and where the people could not agree with the trans-Allegheny counties on the question of prohibiting slavery in the new state. Yet several attempts were made in the convention to include the valley counties, together with additional counties in the southwest. Through the influence of the Baltimore and Ohio railway, whose officials were desirous of getting the road out of Virginia, the proposition was made to include, by a majority of the votes of each county, Pendleton, Hardy, Hampshire, Morgan, Berkeley, Jefferson and Frederick.* The same day that this proposition was carried (February 11, 1862) Brown of Kanawha, who at first had contended that the Blue ridge should be the eastern boundary, moved to include, under like conditions, seventeen additional counties: nine in the southwest (Lee, Scott, Wise, Russell, Buchanan, Tazewell, Bland, Giles and Craig), three between the Allegheny and Shenandoah mountains (Allegheny, Bath and Highland) to fill in the niche between Monroe and Pendleton counties, three extending along the Potomac to a point below Washington (Loudon, Alexandria and Fairfax), and the two counties of the eastern shore (Accomac and Northampton). The majority of the members of the convention, believing that if these counties were included the new state movement would fail, disapproved and defeated Mr. Brown's motion.

Important changes in the electorate and in the election were made. Desiring to accelerate the retarded development which had resulted from tide-water policies and the long-delayed execution of projected intra-state improvements in western Virginia, the new state made a jealous bid for thrifty immigrants by extending the rather liberal suffrage provision of the Virginia constitution of 1851. The residence qualifications for a voter, which had been fixed at two years in the state and twelve months in the voting district, were reduced to one year in the state and thirty days in the district. *Viva voce* voting, "that old aristocratic thumbscrew which had keep a large part of the voters of Virginia virtually slaves," and without which it was generally believed that Virginia could never have passed the ordinance of secession, was replaced by the ballot system. The date of elections was changed from May to October, which was considered a more con-

*Hardy county included Grant which was formed from it in 1866; and Hampshire included Mineral which was formed from it in the same year.

venient time for farmers to meet, and which also was more suitable to the convenience of candidates and politicians.

The legislative body, the name of which was now changed from "general assembly" to "legislature," was to meet annually for not longer than forty-five days unless three-fourths of the members concurred to lengthen the session. Annual sessions were favored on the ground that they would prove less expensive than the biennial sessions which had been tried under the constitution of 1851. For the first time, representation in both houses was to be based on the white population. The delegates were to be elected for a term of one instead of two years, and the senators (half each year) for a term of two years in place of four years. To the age and district residence qualifications for legislators, which remained as in the Virginia constitution of 1851, was added the provision that a senator should be a citizen of the state five years next preceding his election or at the time of the adoption of the constitution.

The clause of the constitution of 1851 which had debarred ministers and bank officers from seats in the legislature was dropped, but a provision was borrowed from the constitution of Indiana debarring any person who had been entrusted with public money and had failed to account for and pay over such money according to law. A new anti-duelling clause disqualified from holding office any person who had been concerned in a duel.*

To the previous Virginia restrictions on the legislature prohibiting it to authorize a lottery, to grant a charter to a religious denomination, or to grant special relief in matters entrusted to the circuit court (to grant a divorce, to change the names of persons and to direct the sale of estates of persons under legal disability), or to form a new county of less than minimum size, were added other restrictions: the prohibition of all special legislation, and of any law which would make the state a stock holder in any bank, or grant the credit of the state in aid of any county, city, town or township, corporation or person, or make the state responsible for their debts or liabilities, or contract any state debt—except to meet casual deficits in the revenues, to defend the state, and to redeem a previous liability of the state (including an equitable portion of the public debt of Virginia prior to January 1, 1861.)

In one instance, the convention, after much debate, increased the

*The reason for inserting this disqualifying clause in the constitution was explained in the report from the committee. The constitution of 1851 had given the legislature the power to pass laws disqualifying persons concerned in a duel; but the legislature, although it had passed such laws, had been accustomed to repeal them temporarily whenever a favorite so disqualified became a candidate for office.

power of the legislature by giving it the additional, but as yet unused, power to pass laws regulating or prohibiting the sale of intoxicants in the state.

The term of the chief executive was changed from four years to two, his term to commence March 4 instead of January 1, and his salary to be reduced from $5,000 to $2,000 per year* His powers and duties remained as under the previous Virginia constitution except that the clause providing that he should be commander-in-chief of the naval forces of the state was omitted. He still had no power to veto an act of the legislature. The office of lieutenant-governor which was considered a very unnecessary appendage was abolished without debate. In opposition to the wishes of Brown and others, who favored their election by the legislature as in Virginia, the convention decided that the secretary of state, the treasurer, and the auditor should be elected at the gubernatorial election for a term of two years. The attorney-general was to be chosen at the same time, and for the same term.

The whole judicial power of the new state was vested by the constitution in a supreme court of appeals (of three judges, but otherwise the same as in the Virginia state constitution), in circuit courts, and in justices of the peace. The nine circuit judges were to be elected for six instead of eight years and the court was to be held at least four times instead of twice a year. Both the much disliked county court and the Virginia district court (created by the constitution of 1851) were abolished without mention.

In the constitution one may see the evidence of the earlier opposition to the inequalities of the Virginia system of taxation. Paxton, in reporting from the committee on taxation and finance, said that no feature of the constitution of 1851 was so odious as that which discriminated in taxation—taxing slave property much lower than the *ad valorem tax* on all other property. Therefore, the constitution clearly provided that all property, both real and personal, should be taxed in proportion to its value, and that no one species of property should be taxed higher than any other species of property of equal value. It also provided that educational, literary, scientific, religious and church property might be exempted from taxation by law.

In its provisions for the local government, the constitution showed distinct departure from the previous provisions of the Virginia con-

*Stevenson, who doubtless changed his mind later when he become governor of the state, said in the convention that, as the governor might be at work but one month in the year and could occupy himself with something else the other eleven months, surely $1,600 would be enough for him.

stitutions. In place of the county court system, which although much remedied in 1851 was still very objectionable to many of the people of northwestern Virginia, the convention adopted the "Yankee institution" of townships as sub-divisions of the counties with provision for regular township meetings and for various officers chosen by the people of each township; a supervisor, a clerk, surveyors of the roads and an overseer of the poor, elected annually; one or more constables elected biennially; and one or more justices elected quadrennially. The county officers retained in the new system were a sheriff (elected for four years and ineligible for the succeeding term) and a prosecuting attorney, a surveyor of land, a recorder and assessor (all elected for two years.)

On the question of education the convention took advanced ground. In this it was much influenced by Mr. Battelle, who, favoring greater financial encouragement than was finally secured, said in the convention that to his certain knowledge people were leaving West Virginia in droves, largely influenced by the fact that elsewhere they could educate their children. The educational question was not new. The earlier discussions had finally resulted in the beginning of a Virginia system of common schools in 1846. Thereafter, the West had continued to agitate for reform of this system, which Mr. Johnson of Taylor county, on March 11, 1850, in the house of delegates, had said was properly called a system from the poor and might as properly be called a poor system—one calculated to create and keep up distinctions in society, and one so abhorrent to the feelings of the poorer class of people that the children of the poor man dreaded to come within the pale of its provisions. Consistent with the policy of the West, expressed in long-continued agitation, the convention provided for the establishment of a thorough efficient system of free schools supported by interest from an invested school fund, net proceeds of all forfeitures, confiscations and fines, and by general personal and property taxes.

In the convention, no one question caused more concern and division than that of slavery.* On the one hand, some strongly urged that the new state should be free from slavery, sustaining their view with the argument that the convention was providing for the future of a region capable of becoming one of the most wealthy and important parts of the Union, and which would long ago have been such had it not been for the curse of slavery which repelled from its borders

*The total population in the forty-eight counties represented in the convention included 12,771 slaves and 334,921 whites.

the white population which had built up half a dozen states in the northwest. "Make West Virginia free," they said, "and she will invite immigrants. Her coal and her iron can be mined only by free labor. Negro slavery is wasteful everywhere, but less profitable in West Virginia than in any other part of the southern states." Some also feared that Congress might refuse the admission of the new state if it should appear so wedded to slavery that it could not apply for admission with a free state constitution. On the other hand, many in the convention, believing perhaps that slavery would gradually become extinct, thought it unnecessary to make any provision for it. The convention finally inserted in the constitution a clause forbidding the importation or immigration into the state of any slave or free negro with a view to permanent residence; but, feeling that there might be some objection to this clause in Congress, it adjourned (on February 18, 1862) subject to recall in case any change should be necessary.*

5. FINAL STEPS TO STATEHOOD.

The remaining steps necessary to secure statehood were promptly taken. On the fourth Thursday of April, the constitution was ratified by the people by a vote of 18,062 to 514. On May 13, the reorganized legislature of Virginia gave the state's consent to the formation of the new state; and on May 29, Senator Willey (representing Virginia) in a speech ably setting forth the causes and conditions which led to the request, presented to the United States senate West Virginia's petition for admission to the Union. On June 13, the committee on territories reported the bill for admission, drawn up largely by Carlile who had previously been an ardent newstate man, and providing that, before the state should be admitted, its boundaries should be extended to include the fifteen valley counties, a new convention should be held, and a new constitution framed with the provision that all children of slaves born after July 4, 1863 should be free. It was evident to those who understood conditions that such a bill, even if desirable, was unpracticable and could not succeed, and some even asserted that its intent was to block admission. After several debates (on June 26 and July 1, 7 and 14), the bill, amended to conform with the boundaries provided in the constitution and to provide

*The convention determined that the constitution should be silent on the question of slavery, and that at the time the constitution should be submitted to a vote of the people on its adoption, a kind of side vote should be taken for emancipation and against emancipation. When the vote was taken it was 6,052 for emancipation to 610 against, or ten to one in favor of a free state. The vote on the adoption of the constitution taken at the same time was 18,862 in favor to 514 against it.

1
PENNSYLVANIA
Counties represented in First Wheeling Convention, May, 1861.
(shaded)

2
PENNSYLVANIA
Counties represented in Second Wheeling Convention June, 1861
(shaded)
(Add Alexandria and Fairfax)

3
PENNSYLVANIA
Counties represented in the First Legislature of the Restored Government of Virginia, July, 1861.
(shaded)
(Add Fairfax, Alexandria, Accomac and Northampton)

4
PENNSYLVANIA
Counties voting Election of Governor Pierpont May, 1862.
(shaded)
(Add Fairfax, Alexandria, Accomac, and Northampton)

5
PENNSYLVANIA
Counties represented in the Constitutional Convention of West Virginia 1861-1863
(shaded)

6
PENNSYLVANIA
Counties voting on Amended Constitution March 26, 1863.
(shaded)
In each county which voted the majority was for the constitution.

7
[In Feb 1862, Brown of Kanawha had proposed to include nine counties in the southwest (Lee, Scott, Wise, Russell, Buchanan, Tazewell, Bland, Giles and Craig), three more east of the Alleghenies (Alleghany, Bath, and Highland), three more along the Potomac (Loudoun, Fairfax, and Alexandria), and also Accomac and Northampton of the eastern shore].
PENNSYLVANIA
Proposed Boundaries of West Virginia (Carlile plan) June 23d 1862

8
PENNSYLVANIA
Counties occupied by Home Guards in the Civil War.
(dotted)

Old Washington Hall
Birthplace of West Virginia
May-June, 1861.

Old Wheeling Custom House
Meeting-place of Conventions
June and August, 1861; and 1862.

Linsly Institute
First capitol of West Virginia,
1863-1870; state capital again
in 1875.

Old Ohio County Court House.
Used by House of Delegates after
return of capital to Wheeling
from Charleston in 1875.

Wheeling City Hall
Used as capitol building, 1876-1885.

Historic Buildings, Wheeling.

for gradual emancipation, passed the senate on July 14, 1862—although opposed by Carlile. On December 10, after a term of postponement, it passed the house (by a vote of 96 to 55) and on December 31 was signed by the President.* On February 12, 1863, the constitutional convention reconvened and made the necessary provision for gradual emancipation; and on March 26, the amended constitution was ratified by the people by a vote of 23,321 to 472. On April 20, the President issued his proclamation by which, on June 20, 1863, West Virginia became the thirty-fifth state of the Union. The new state government promptly replaced the reorganized government of Virginia, which folded its tents, moved from the new state and located at Alexandria.

West Virginia entered upon her career as a separate state of the American union at the most critical period in the war of secession—two weeks before the battles of Gettysburg and Vicksburg. After the President's proclamation of April 20, the new government was rapidly organized. Arthur I. Boreman for governor, and other state officers, nominated at a convention at Parkersburg early in May, were elected the latter part of the same month. Judges of the supreme court and county officials were elected at the same time. On June 20, the state officers began their duties. On the same day the first legislature (20 senators and 51 delegates) assembled, and on August 4, it elected two United States senators—Waitman T. Willey and Peter G. Van-Winkle, who after some formal objection were duly admitted. Soon thereafter, each of the three newly formed congressional districts elected delegates who were promptly admitted to the house of representatives.

*The bill as passed contained a condition requiring that the Willey clause which Congress had prescribed relating to slavery should be inserted in the constitution by the constitutional convention, and adopted and ratified by a majority of the voters, and that after this was done and duly certified the President of the United States could lawfully issue his proclamation by which the act should take effect and be in force on and after 60 days from the date of said proclamation.

VIII. The Strategy of War

1. WEST VIRGINIA'S PART IN THE CIVIL WAR.

In the war of secession, to which West Virginia owes her existence as a state, the West Virginians in proportion to their number and wealth did as much as the people of any other state. That they were not friendly to secession was shown by their vote of ten to one against the Virginia ordinance of secession. That the determined character of this opposition to the action of Virginia was underestimated by the authorities at Richmond was shown by the persistent efforts of Virginia to secure control of her western counties and to collect forces therein for the Confederacy. Not until the failure of the Imboden raid was the true sentiment of West Virginia understood by the Confederates. To the Union army she furnished over 30,000 regular troops, exclusive of the 2,300 Home Guards consisting of 32 companies organized to defend 32 home counties from invasion. For the Confederate service she furnished between 7,000 and 10,000 men, nearly all of whom enlisted before the close of 1861. The importance of West Virginia's contribution to the war can not be estimated alone by the number of men which she furnished. The failure of the Confederates to hold the territory and to secure the Baltimore and Ohio railway gave the Union forces a great advantage in the transportation of troops between Ohio and the East.

2. CONTEST IN NORTHWESTERN VIRGINIA.

At the opening of the war the strategic Monongahela region of West Virginia became the theatre of contending armies in a series of introductory episodes which were larger in significance than in size of forces engaged or extent of territory covered. The geographic position of the Baltimore and Ohio railroad, crossing the region of the Monongahela drainage system and the eastern panhandle, and connecting Washington with the Ohio, made it of inestimable value as an aid in the military operations of the United States government throughout the war and at the same time determined to a large extent the theatre of Confederate operations, especially at the inception of the war. The results of the campaign, in which the battle of Philippi occupied a prominent place, determined the control of

northwestern Virginia including the western division of the Baltimore and Ohio railway, contributed largely to the control of the remainder of the Baltimore and Ohio route from the mountains eastward to Baltimore, encouraged the movement for the formation of a new state west of the mountains, and influenced the result of later important military events of the war.

The secessionists very early in the war saw the importance of establishing their lines along the border of Ohio and Pennsylvania which they hoped to make the battle ground. At the same time they underestimated the strength of the opposition which the people of northwestern Virginia would offer to the attempt to join them to the fortunes of the Southern Confederacy. They especially desired to control the Baltimore and Ohio railway which had a geographic position of great strategic importance, and by which they particularly hoped to prevent the concentration of federal troops on Maryland and Virginia.

Therefore, on April 30, 1861, General Lee ordered Major Boykin, of Weston, to call out volunteers and assume command at Grafton, and took steps to control the Ohio terminals of the main road at Wheeling and the branch road at Parkersburg. On May 4, he directed Colonel Porterfield, of Harper's Ferry, to call out additional volunteers to rendevous at Grafton, to assume general command over Boykin and others in the vicinity, to distribute 200 muskets which at the request of Boykin had been sent to Colonel Jackson at Harper's Ferry, and to issue requisitions for additional arms. On May 11, he ordered 400 rifles and ammunition from Staunton to Major Goff at Beverly to be placed at the disposal of Colonel Porterfield for use in the vicinity of Grafton.

In the meantime Boykin had encountered great difficulty in assembling a force in the vicinity and had made a request for companies from other parts of the state—a request to which General Lee did not think it wise to comply.

On May 16, Colonel Porterfield reported from Grafton, stating that he discovered great diversity of opinion and much bitterness of feeling and that he was seriously disappointed to find that Major Goff at Beverly had received no rifles and had no information that any had been sent. Both at Pruntytown and at Philippi he found a company organized and awaiting arms; and he was assured of another company which was forming at Clarksburg, but which was without either arms or uniforms. He reported that two companies were marching toward Grafton to aid him: that of Captain Boggess, of Weston, which

had only flint-lock muskets, in bad order and without ammunition; and that of Captain Thompson, of Fairmont, which had better guns but little ammunition. Although urging the need of the best rifles, he doubted whether there would be much use of the bayonet in the hills, and thought that the rifles which had been in the fire at Harper's Ferry would do if fitted up.

Ordered to advance to Wheeling, Porterfield, before he had time to act and while disappointed with the failure of his appeals to secure adequate arms and ammunition, found it necessary to fold his tents and fall back toward Philippi before a superior force of troops from Wheeling—the vanguard of the army of McClellan—under Colonel Kelly who proceeded to occupy Grafton without firing a shot. He had burned two bridges four miles east of Mannington; but failing in his plans to execute Governor Letcher's order to destroy the railroad at Cheat river, and blow up the tunnel through Laurel Hill, he was unable to prevent the Baltimore and Ohio from falling into the control of the Federal forces, which thus obtained a great advantage in the operation of the war.

In the closing days of May, General McClellan's 20,000 troops had crossed the Ohio at Parkersburg and Wheeling; and on June 1, about 4,000 of these under General Thomas A. Morris, of Indiana, reached Grafton. Early in the evening of the following day, 3,000 of these marched by two routes on Philippi (twenty miles southward) where Porterfield had halted with his poorly equipped forces to resist the further advance of the Federals. Just before the dawn of June 3, the two columns converged upon the town, after a march over muddy roads, and fired the opening guns of the first inland battle of the war. The heavy storms which had impeded their march and tested the physical endurance of the young army, had caused the Confederate pickets to retreat from their posts without order to find shelter at Philippi.

The rapid race of the Federals to Philippi, succeeded by the brief battle in which not a single person was killed, was promptly followed by the precipitate retreat of the stampeded Confederates who abandoned their baggage in their narrow escape from capture on the Beverly road and left the Baltimore and Ohio free to transport armies for the preservation of the Union. On June 22, McClellan crossed from Ohio with his official staff; and on June 23, he established his headquarters at Grafton.

General Robert S. Garnett, who superseded Porterfield, and reinforced his army to over 6,000 by troops from eastern Virginia, com-

pletely failed with inadequate force to recover an important strategic position by plans to establish a base at Evansville in Preston county. Later (July 11), routed at Rich mountain (five miles west of Beverly) and at Laurel Hill (Belington) where he had constructed fortified positions to prevent the union troops under McClellan from moving south toward Staunton, he returned to Tucker county endeavoring to escape by felling trees across the road behind him; but at Corrick's Ford he was overtaken and killed while retreating from a battle which closed the campaign by putting to flight the remnant of his army.

On July 14, McClellan moved southward and occupied Huttonsville, followed by the line of military telegraph by which throughout his brief campaign he had been able to keep in touch with Grafton and to announce to the excited country the news of his victories—which, although small in comparison with many later victories of the war, were important as a preparation for some of those later victories, and were significant in their larger results which contributed to the integrity of the Union.

In the following October, the Federal force under General Reynolds advanced across the Cheat river into Pocahontas county and attacked a Confederate force which soon fell back from the Greenbrier to the Allegheny mountain, from which they later moved eastward.

Garnett in his report from Laurel Hill informed General Lee that the lack of enlistments and lack of aid to the Confederate cause indicated that he was in a foreign country. After his retreat there were few Confederates in West Virginia west of the Alleghenies and north of the Kanawha valley.

2. CONTEST FOR THE KANAWHA.

In the contest to gain and retain control of the Kanawha valley the Confederates also lost. The policy of Lee was to hold the valley by posting a force below Charleston. General Henry A. Wise, who was ordered to the Kanawha at the beginning of the war, experienced considerable difficulty in raising and equipping soldiers in that region, but finally secured an army of 8,000 men (including about 2,000 militia from Raleigh, Fayette and Mercer counties) with which he planned an advance against Parkersburg. In July 1861, threatened by a Federal army under General J. D. Cox who advanced across the Ohio into the Kanawha valley, and by another which moved southward from Clarksburg, he fell back to the upper Kanawha. Late in

August, he attacked the army of General Cox near the mouth of Gauley but was defeated in the ensuing battle, and was pursued vigorously. A week later, his colleague General Floyd, who had recently established his army at Cross Lanes in Nicholas county, was attacked at Carnifex Ferry by Federal reinforcements advancing from Clarksburg under General Rosecrans, and he withdrew at night into Greenbrier after burning the bridge behind him to prevent pursuit. In the following November, he was defeated by Rosecrans at Gauley Bridge in a final battle of a campaign which left the lower valley in the hands of the Federals. After the defeat of Wise and Floyd in detail, facilitated by their own continual lack of concert and co-operation, the Confederates were finally pushed over the Alleghenies in this region, and never again obtained a permanent foothold.

In Fayette county, the people were largely in favor of the Confederate cause. In May, 1861, the county court at a special session appropriated $5,000 for the purchase of equipment and uniform for soldiers of the Confederacy. In June, it invited the peaceful resignation of any member of the court who might feel friendly to the North. The county furnished a company for the Union army, however. Federal forces which occupied Fayetteville, in the fall of 1861, remained until they were driven out, on September 10, 1862, by General Loring's forward movement from the Narrows; and they returned, in May, 1863, to drive the Confederates out. During the war there was a general exodus of the citizens, and only four houses remained at the cessation of hostilities.

After 1861, the Confederates never made a serious attempt to recover or to hold the trans-Allegheny region of West Virginia. Although, as late as 1863, certain politicians and generals in the Confederate service still believed the majority of the West Virginians were in sympathy with secession they had no shadow of a basis for any lingering hope after the great raid of Imboden which found few willing to grasp the opportunity to enlist in the Confederate service.

3. CONFEDERATE TRANS-ALLEGHENY RAIDS.

Although by the campaign of McClellan southward from Grafton to Huttonsville, the Confederates practically lost control of the entire region of northwestern Virginia, which so largely controlled the Baltimore and Ohio railway, and although they found no subsequent opportunity to make a serious attempt to regain it, they made several subsequent raids which produced a feeling of uncertainty and insecurity in some sections and severely tested the alertness of the

Federal forces and Home Guards. General A. J. Jenkins with 500 Confederates made a raid through Randolph, Upshur and Lewis (and westward to the Ohio) in August, 1862. General John D. Imboden with 310 Confederates reached St. George in Tucker county in November, 1862, and planned to destroy the Baltimore and Ohio bridge across Cheat at Rowlesburg, and some neighboring trestles, but at the news of approaching Federals he retreated to Pendleton county. In the following spring he directed a double raid—one division of which, led by General William E. Jones via Greenland Gap to Preston county, then via Albrightsville to Morgantown and Fairmont, and in Lewis and Upshur counties formed a junction with the main division under Imboden, which entering Randolph had captured Beverly and moved through Barbour. From Weston, Imboden moved southwesterly to sweep the Kanawha, and Jones advanced to the petroleum wells in the direction of Parkersburg. In June, 1863, Beverly was again attacked by General William L. Jackson with 1,200 Confederates, but they were driven back by General W. W. Averell's body of cavalry, largely composed of West Virginians, which proved better than the earlier infantry troops in protecting the region through which it moved.

Later raids were that of Colonel V. A. Witcher, in September, 1864, who started from Tazewell county and penetrated to Weston and Buckhannon, and two later attacks on Beverly—one under Major Hull in the autumn of 1864, and the other under General Rosser in January, 1865.

In their repeated raids, the Confederates were doubtless encouraged by the demoralization resulting from the divided sympathies of the people in several counties of the region visited. At the outbreak of the war, nearly all county officers of Barbour were Southern in sympathies; and for several months after Colonel Porterfield was driven from Philippi, there was no execution of the law by the civil authorities, and Philippi was almost deserted. In the following September, under the Reorganized Government of Virginia, there was an election to fill vacancies. In the winter of 1862-63, the new sheriff, Mr. Trahem, was kidnapped from his home by a detail of Confederates, under orders from General Imboden (who was encamped in Augusta county), and was sent to Richmond. Although he was released and allowed to return, his capture led to retaliatory acts against the Confederate sympathizers in the county. In the raids under Imboden and Jones, which occurred in the spring of 1863, Barbour was not as much concerned as other counties of the region. In several cases

records were carried away, and in Randolph the sheriff (J. F. Phares) was shot. Later, near the close of the war, M. T. Haller in command of the Home Guard in Barbour county was killed in an ambush by a Confederate scouting party led by a Mr. Moore.

In May, 1863, the Federal authorities adopted precautionary measures to lessen the dangers of any future Confederate invasion. General Averill was sent with a mobile force, drawing its supplies from Clarksburg, to patrol the region south of the railroad to the Kanawha, and to cooperate with General Kelley commanding on the line of the railroad, and with General Scammon commanding on the Kanawha and the Gauley. He was instructed to guard the passes and approaches via Cheat River Mountain on his left, and to be ready in an emergency to cross the mountains to aid in any movement in the direction of the Valley of Virginia. He was later assigned to the Kanawha valley.

4. CONTEST IN THE EASTERN PANHANDLE.

In the eastern panhandle—beginning in April, 1861, by the swift seizure of Harper's Ferry whose strategic importance was largely determined by its railway connections westward and up the Shenandoah—Confederate operations occurred at irregular intervals until near the close of the war, and were usually along the route of the railway.

After the Confederates realized that West Virginia had forever slipped from their grasp and that the Baltimore and Ohio could no longer be utilized in the earlier plans to fortify the banks of the Ohio, they became openly hostile to the road and sought to damage it so that it could not carry Union troops from the Ohio to the Potomac. Governor Letcher of Virginia said, "The Baltimore and Ohio railroad has been a positive nuisance to this state from the opening of the war till the present time; and, unless the management shall hereafter be in friendly hands, and the government under which it exists be a part of the Confederacy, it must be abated." In the raids under Jones, Imboden and Jackson, the officers had instructions to strike the Baltimore and Ohio wherever possible. Jackson at one time complained to President Garrett that the eastbound trains disturbed the repose of his camp and requested a change of schedule. To this request President Garrett complied. During the war, many Baltimore and Ohio trains were captured; and, in some cases, the engines were transported for use on the "scantily stocked Virginia roads of the same guage." The bridge at Harpers Ferry was twice destroyed, and

the extensive machine-shops and engine houses at Martinsburg were razed to the ground.

Early in the conflict, the Confederates held the entire railroad in their grasp from Harpers Ferry westward to Piedmont, and over the mountains. In May, 1861, General "Stonewall" Jackson, by the practice of strategy between Martinsburg and Point-of-Rocks, caught many trains which after a run by steam to Winchester were removed by horse power to the railway at Strasburg—producing a loss to the Baltimore and Ohio which crippled it seriously for some time. The withdrawal of General Johnston from Harpers Ferry to Winchester, in June, 1861, gave the railroad company an opportunity, quickly grasped, to rebuild the section of its road which had been destroyed. In May, 1862, Jackson, after his celebrated raid down the Shenandoah, pursued General Banks to Martinsburg and westward to Williamsport, Maryland; but he soon retreated to Harpers Ferry and up the Shenandoah, followed above Strasburg by forces under General Fremont who had recently taken command of the Mountain Department with headquarters at New Creek (subsequently at Petersburg and Franklin). In 1862-63, the railroad sustained severe losses—12 locomotives and tenders, 386 cars, 23 bridges, 36 miles of track and telegraph, and water stations on a section over one hundred miles long.

In September, 1863, the railroad was kept open by detachment of the Army of the Potomac while it transported a large army westward *en route* to Chattanooga to support Rosecrans.

East of the mountains, the Federal authorities built a fort on the Potomac at the mouth of New creek (Later Keyser) which became an important strategic point, especially for the protection of the route of the railroad eastward and for the South Branch country southward and eastward. From this point, General Kelley directed the attack on Imboden in Hardy county on November 18, 1863, and completely routed him. From this point also advanced General Averill, in December, 1863, at the head of a femous expedition (2,500 cavalry and artillery) under orders from General Kelley to cut the Virginia and Tennessee railroad at Salem, at all hazards, in order to prevent Confederate supplies from reaching Longstreet who was besieging Burnsides at Knoxville. Forward by the most direct route via Petersburg he and his men rode for five days and nights, through terrible storms or by swimming over flowing mountain streams, over terrible roads and for long periods without rest; and, after outfighting and outriding 12,000 Confederates who tried to hem them into the

jaws of death, they returned in triumph. Eluding four Confederate armies which marched and counter-marched to cut them off, they reached Salem on December 16, performed the task assigned, striking a blow which was felt throughout the Confederacy; and, after many hardships of a perilous retreat before the pursuing Confederates, found an avenue of escape across the Alleghenies into Pocahontas county and reached Beverly without the loss of a single cannon. In retaliation for this blow at Salem, General Fitzhugh Lee made an invasion of the South Branch valley, penetrating to Romney after leaving his artillery at the eastern base of the Shenandoah mountain.

In 1864, the Confederates made several attacks along the route of the railway. Late in January, 1864, General Early invaded the South Branch and, after compelling the evacuation of Petersburg, sent a foraging party under General Rosser to collect cattle and destroy railway bridges east of Cumberland. In May, 1864, Captain J. H. McNeill with sixty-one Confederates seized Piedmont and burned much railroad property. On July 4, 1864, Imboden made an attempt to destroy the railroad east of Cumberland. On August 1, 1864, Confederate forces, after burning Chambersburg, Pennsylvania, attacked General Kelley at Cumberland, and, after a repulse, crossed the Potomac at Old Town, advanced to Romney and attacked New Creek, but were overtaken by General Averell (by order of Kelley) at Moorefield and completely routed. Thereafter, Kelley was employed in defense of the railroad. In November, 1864, General Rosser with 2,000 Confederates attacked Keyser and captured much property.

Throughout the war, the spacious walled highway of the Shenandoah, by its relation to the passes of the Blue Ridge flanking it on the east and to the northern route via Hagerstown (Maryland) and Chambersburg (Pennsylvania), was an important geographic factor in strategic military movements and diversions—enabling the two armies of Virginia, by marching and countermarching, to play a game of back-and-forth "hide and seek," furnishing the opportunity for unexpected dashes of attack or of support, and contributing strongly to the Confederate advantage until the Irish soldier Sheridan caused the peace of desolation to rest upon the valley, preparatory to the grander peace which soon thereafter came to the entire reunited country.

IX. Political Problems and Reconstruction

1. BORDER DISORDERS OF THE WAR PERIOD.

The new state government, laying the foundation stones of state institutions and of future order and development, was confronted by many serious difficulties and obstacles—economic, social and political. The people, separated into many detached local groups by precipitous mountains and rugged streams, had not developed unity of action nor social and commercial identity except perhaps in the counties along the Ohio, and along the Baltimore and Ohio railroad.

The most serious immediate political difficulty was the sympathy for the Confederacy exhibited in various parts of the state. Although the Confederates had soon lost control of the larger part of the state, over 7,000 West Virginians had entered the Confederate army early in the war—about one-fourth of the number who enlisted in the Union army—and the Confederate raids and skirmishes into the state, at first to prevent separation from Virginia, were continued until the close of the war.

Counties along the southern border of the new state were partially under the control of the Confederates until near the close of the war, and "were forced to pay heavy taxes to the Richmond government and to furnish soldiers for the Confederate army." Other counties along the border suffered from irregular "bands of guerillas and marauders" whom the state troops were unable to manage. In this sad state of disorder, the governor recommended that the citizens should organize to capture and kill the "outlaws" wherever and whenever found, and appealed to the Washington government which organized the state into a military district under command of General Kelley who scattered many irregular bands, and generally rendered life and property secure; but, in some portions of the state, the civil authorities were helpless against lawlessness long after the close of the war.

Under these conditions, the administration was seriously embarrassed by lack of funds to meet ordinary expenditures. In 1864, the governor reported that one-half of the counties had paid no taxes, and that others were in arrears. In fourteen counties there were no sheriffs or other collectors of taxes "because of the danger

incident thereto." The burdens of the counties which paid were necessarily increased. One of the earliest measures of the state government was an act (1863) providing for the forfeiture of property belonging to the enemies of the state, including those who had joined the Confederate army, but such property was seized only in a few instances and the law remained practically a dead letter because the citizens of the state were usually unwilling to take advantage of the political disabilities of their neighbors.

Although, in the election of 1864, there were only a few scattering votes in opposition to the officers of the state administration, there was no means of obtaining an expression of the people in some of the extreme southern counties where the governor reported that owing to the Confederate incursions and local conditions it was still impracticable to organize civil authority.* In some counties a large portion of the inhabitants denied that they were legally under the jurisdiction of West Virginia—stating that their county had never taken a vote to authorize anyone to represent them at the Wheeling convention nor to ratify the constitution which was made there.

It was late in the fall of 1865 before there was anything like a full restoration of civil government in Mercer county—partly because everything in the system of local government administered by townships, and by a county board of supervisors, was new and novel to the people who had always known nothing but the old Virginia county court system—a system under which one or more magistrates in each magisterial district was clothed with jurisdiction to try warrants for small claims and to sit as a court to administer county affairs. There was strong opposition to the board of county super-

*In some counties there were geographical lines of division resulting in the formation of new counties: Mineral was formed from Hampshire in 1866, Grant from Hardy in 1866, and Lincoln from four older counties in 1867.

In Grant county conditions, similar to those which caused its formation in 1866, also produced a series of county-seat contests. The county-seat was first at Maysville. Until the courthouse was completed at Maysville in 1866, court was held in an old building at Laurelton, about one mile west of Maysville. About 1870, the question of removal of the county-seat was submitted to a popular vote at a special election. The result was in favor of Petersburg. The legislature of 1872-73 passed an act which made a three-fifths vote necessary for the removal of the courthouse. In 1876, at the general election, the question was submitted again to popular vote. Maysville obtained a majority of the votes but not the necessary three-fifths. About 1880 the question was submitted again and was decided in favor of Maysville, but a dispute arose in regard to the technical legality of the election, resulting in a decision against its legality by the supreme court. In 1895, Hon. A. C. Scherr, together with F. M. Reynolds (a member of the legislature from Mineral county) and the representative from Grant county, prepared a special bill which became a law, requiring only a majority vote for the removal of any county-seat which had been moved prior to the year 1872. As a result of this act, designed to apply only to Grant county, the county-court immediately ordered an election which gave Maysville a majority vote, resulting in the removal of the county-set. Judge Armstrong of the circuit court then decided that the bill of 1895 was unconstitutional, and the supreme court confirmed the decision. Thereupon, Petersburg again became the county-seat.

visors which at first was composed of men who could not write their names.

At the close of the war, in which there had been much waste and destruction of property accompanied by arrested development in regions which had previously begun to feel the pulse of a larger industrial life, the people of the new-born state turned first to the work of material reconstruction and then to the larger economic utilization and exploitation of rich but latent resources whose development was possibly hastened by the separation from the Old Dominion.

2. TEST OATHS, DISFRANCHISEMENT, AND DISORDER.

At the close of the war, there were still many sources of disorder and friction. The most prominent related to the political status of those who had joined or aided the Confederate cause. Although the larger number of the brave Confederate soldiers from West Virginia laid down their arms in good faith and without desire for revenge, and returned in peace to build up and start anew as useful citizens of the young commonwealth they were confronted with laws which denied them the privilege of suffrage. Notwithstanding that the constitution had extended the right of suffrage to all white male citizens of the state, the first general election laws of West Virginia, passed in 1863, had provided for election supervisors and inspectors who were authorized to require, from all whose eligibility to vote was in doubt, an oath to support the constitution of the United States and of West Virginia. Naturally the Unionists considered that those who had supported the Confederate cause could not safely be entrusted with political power immediately after their return from the Confederate armies, and before they had proven their willingness to cooperate in maintaining the established order. This opinion was largely based upon conditions and events immediately preceding the close of the war, and was especially enforced by reports of various acts committed in Upshur, Barbour, Marion, Harrison and other counties. The action of a comparatively small number of lawless ex-Confederates provoked the enactment of new laws which were regarded as unjust to many law-abiding citizens. The legislature, however, could make no distinction, and, with partisan spirit increased, on February 25, 1865, passed the voter's test act, requiring from all voters an oath that they had neither voluntarily borne arms against the United States, not aided those who had engaged in armed hostility against the United States. On March 1, with some fear that the test-oath act

was not constitutional, the legislature also proposed an amendment* disfranchising those who had given voluntary aid to the Confederacy—of course with the intention of removing the disabilities in course of time. This proposed amendment, which required the concurrent approval of the subsequent legislature and ratification by popular vote before it was part of the constitution, further aroused the spirit of antagonism and insubordination in the minds of the ex-Confederates who, returning with a spirit entirely different from that of the Confederate raiders and law-breakers of an earlier date, were "impatient to repossess themselves of place and power." The test-oath act was opposed on the ground that in most cases it operated against persons who had accepted the results of the war and who claimed full recognition as citizens under President Lincoln's amnesty proclamations. In the election of 1865, it was not strictly enforced; and, in a few places, it was entirely ignored. Many ex-Confederates, claiming that the law was unconstitutional, took a free hand in organizing the local government. In many parts of the state, they were sustained by local citizens who claimed that since the war was ended the requirements of the law were unnecessary, unwise, unjust, and contrary to the American idea of government. In some places they ran for office, and in Greenbrier county two were elected—one to the state senate and the other to the house of delegates. In many instances, however, the oath was enforced—resulting in a large number of damage suits brought by persons who were denied the right to vote, either because of the refusal to take the oath or because of inability to take it. In his message of January, 1866, Governor Boreman, commenting upon the alacrity with which the ex-Confederates insisted upon participation in politics, advised the legislature to enact a more efficient registration law, to require election officers to take a test oath, and to give the neccessary concurrence in the proposed disfranchisement amendment so that it could be submitted to the people. The legislature, although some of its able leaders advised the cessation of proscriptive measures, promptly passed a registration law, authorizing the governor to appoint in each county a registration board consisting of three citizens who were given power to designate the township registrars, and to act as the court of last appeal in all elec-

*The amendment was as follows: "No person, who, since the first day of June, 1861, has given or shall give voluntary aid or assistance to the rebellion against the United States, shall be a citizen of this state or be allowed to vote at any election held therein, unless he has volunteered into the military or naval service of the United States and has been or shall be honorably discharged therefrom."

tion and voting contests.* It also concurred in the proposed "decitizenizing" amendment which was promptly submitted to the people at an election held in May 1866, under the operation of the new registration law, and ratified by them by a majority of about 7000 votes, thereby disfranchising between 10,000 and 20,000 persons. By the execution of the registration law at this election, much bitter feeling was engendered, resulting in a determined, aggressive and hostile resistance to proscription, by an increasing party which asserted that the ratification of the amendment had been illegally and unconstitutionally secured. Some threatened to move to Ohio, under whose laws they could exercise the rights of citizenship.

Although there is yet considerable difference of opinion in regard to the wisdom of these measures, it is generally agreed that they were in part the natural result of conditions which seemed to threaten not only the politics of the administration but also the integrity and independence of the new state. Many of those who were disfranchised hoped to see West Virginia return to the control of Virginia. In Jefferson county, a large number of persons, stating that the transfer of the county from Virginia to West Virginia during their absence was illegal and void, refused to acknowledge that they were West Virginians and attempted to hold an election as a part of the state of Virginia; but they yielded when General Emory was sent to aid the civil authorities in maintaining the law. Virginia, too, tried in vain to secure the return of Jefferson and Berkeley counties, first by annulling the act of the Pierpont government which had consented to the transfer, and second (1866) by bringing a suit in the Supreme Court, which in 1871 was decided in favor of West Virginia. In 1866 while Pierpont was still governor of Virginia, the legislature of that state appointed three commissioners to make overtures to West Virginia for the reunion of the two states; but the legislature of West Virginia rejected the proposition in 1867, stating that the people of the new state were unalterably opposed to reunion. At the same time, the legislature, although it repealed the registration law of 1866 in order to thwart the argument of unconstitutionality which was urged against the proscription laws, was forced by circumstances in some of the southern border counties to enact in its place a more exacting registration law, requiring the applicant for registration not only to take the test oath but also to prove that he was qualified to vote. A state of insubordination existed in three or four counties. In some places

*This act, which was regarded as necessary to the execution of the provisions of the proposed constitutional amendment, also denied access to the ordinary courts of justice in cases of persons bringing suit against election officers.

no elections were held in the fall of 1866, because of the fear of violence. The judge of the ninth district, including Greenbrier and Monroe counties, received anonymous letters threatening his life. In his message the governor stated that the ex-Confederates who caused the trouble were "learned men."

The new registration law, which gave to registrars the power to identify those who had aided the secessionists in any form, increased the antagonism to the administration and the opposition to the laws. Prior to each election in 1867, 1868, 1869 and 1870, opposition to the execution of the law was heated and intense, resulting often in threats and menaces against the registrars and registration boards. During the campaign of 1868 there was much partisan excitement; and many, unable to take the iron-clad oaths which would enable them to vote, and perhaps further irritated by the adoption of the fourteenth amendment, frequently attempted to intimidate public officials, and threatened violence which in some places prevented elections and in others compelled the governor to appeal for Federal troops to aid in the maintenance of law and order. Force was necessary to aid in the execution of the law in the counties of Monroe, Wayne, Cabell, Logan, Randolph, Tucker, Barbour and Marion. In some counties the restrictions were almost entirely disregarded. At Fairmont, in Marion county, proscribed persons who had in some way gotten their names on the registration books tried by intimidation to induce the board of registration to retain them there. As might have been expected, in some instances disorders arose from the arbitrary refusal to register persons against whom there was no tangible evidence, or from unnecessary and unwise rigidity in administering the law.

3. REMOVAL OF SUFFRAGE RESTRICTIONS.

Before the election of 1869, there was a vigorous discussion of the suffrage question in all its phases, accompanied by a bolder and more aggressive opposition to the enforcement of the registration laws. With the admission of negroes to the suffrage by the fifteenth amendment, which was proposed by Congress, February 1869, and ratified by the West Virginia legislature in the same year,* the question of removing the restrictive legislation which disqualified Confederates from voting became more and more prominent and was seriously considered by the more conservative wing of the party in power. A large num-

*Henry G. Davis, striving to hold the majority party to its previous declaration of principles opposed to negro enfranchisement, urged that the fifteenth amendment should be submitted to a vote of the people. The action of the legislature in ratifying the amendment produced a reaction, causing many conservatives and liberals to unite with the Democrat party.

ber of the liberal Republicans considered that a continuance of the test-oaths was inexpedient, and desired to adopt some policy that would terminate the bitter animosities of years. A majority of the legislators chosen at the hotly contested election of 1869 favored repeal or amendment of the proscription laws, but could not agree upon a definite plan. The legislature of 1870 repealed some of the test oaths. Governor William E. Stevenson, a man of liberal as well as vigorous progressive views, earnestly favoring liberal legislation to encourage projects of internal improvement and industrial enterprise which would engage the people of the state in the development of its resources and terminate the quarrels over past issues, recommended an amendment of the constitution to restore the privileges of those who had been disfranchised by the amendment of 1866. W. H. H. Flick in the house proposed the amendment* which, after acceptance by the legislature of 1870 and 1871, was ratified by a vote of the people by a majority of 17,223 and proclaimed by the governor in April 1871. Judging from the figures in the Auditor's report, it appears that many disfranchised persons voted for the constitutional amendment which determined their legal right to vote.

In the meantime, in the election of 1870, the opposition pushed their claims to registration—often by intimidation of the registrars. In some counties the law was so far disregarded that every male of the required age was registered. This laxity in the enforcement of the more stringent features of the registration law, together with the opposition to negro suffrage, resulted in a victory for the Democrats who elected John J. Jacobs governor by a majority of over 2000 votes and secured a working majority in both houses which they retained for a quarter of a century—largely by their conservative policy in following to completion the plans initiated by the Republicans.

*Each political party became divided on the proposed amendment, which required the sanction of another legislature and sanction by the people before it became effective. In the convention of 1870, it was the issue and subject of debate. Democrats refused endorsement because the word "white" was omitted. Republicans could give no enthusiastic and unqualified endorsement, because "Radical" opposition within the party was reluctant to lose very valuable election machinery. After the official announcement of the enactment of the Enforcement Act by Congress, in May, 1870, the Democrats raised the slogan of the "white man's party." At registration time, they claimed that under proper interpretation of the Enforcement Act any voter who declared his intention to take the test-oath could not be denied the privilege of suffrage—and they circulated posters explaining their interpretation. The party in power, however, refused registration on grounds more technical than before—its local officers requiring each person, whose right of suffrage was questioned, to prove that he was a voter. Democrats, who complained that they were illegally denied the right to vote, appealed to Judge J. J. Jackson (a Democrat) of the Federal district court which had been given cognizance of all cases arising under the Enforcement Act. When Judge Jackson sitting at Clarksburg appointed federal election commissioners who began to arrest the offending election officials and registrars, the Republicans appealed to the Federal circuit court in the form of a *habeas corpus* proceeding before Judge Bond, who by releasing the prisoner in the case reversed Jackson's position and instruction of the previous August. Flushed with dawning victory, the Democrats continued to make arrests; and, at the close of the hotly contested campaign, won a complete victory.

4. CONCRETE ILLUSTRATION FROM MERCER COUNTY.

In Mercer county, where business after the war languished under political disabilities,* the struggle to overthrow the registration laws and to secure "home rule" was closely connected with a county seat fight, in which one party later charged that the board of supervisors, by its power to lay and disburse county taxes, squandered or stole or wasted a large amount of public funds.

In the fall of 1865, Judge Nathaniel Harrison, recently elected judge of the circuit court of the seventh judicial district, including Monroe, Pocahontas, Nicholas and Greenbrier, and a man detested by ex-Confederates for his desertion from their cause, rode into Princeton to hold his court at the old county seat established in 1837,** but receiving no invitation to alight, he rode eastward and opened court at Concord Church on the Red Sulphur turnpike. At the close of his first term of court "in the forests" at Concord, the people of that section, and of other sections of the county, began an agitation for the permanent removal of the county seat from Princeton to Concord. In the election which followed to settle the question of removal, Concord failed to receive the requisite three-fifths. In a second election, however, she won by the decision of the board of supervisors, and soon began the erection of a court house which was never completed.

A legislative act of 1867 (secured by Colonel Thomas Little), which permanently located the county seat at Princeton was repealed in 1868 through the influence of George Evans, the representative from Mercer. Then followed a fight of injunctions, obtained first by one faction and then by the other.

In the fall of 1869, at a meeting of the board of supervisors, Mr. Benjamin White, sheriff of the county and a resident of Princeton, in a strong and boisterous speech, urged that public records were no longer safe at Concord Church and should be removed at once to Princeton. His speech so alarmed two of the board that they retired from the meeting. The remaining three members of the board, on the question of removal, voted with Mr. White, who thereupon procured wagons in which the records were taken to Princeton. The removal aroused a feverish excitement which threatened collision. It was aided by Mr. George Evans who, after the tender of the promised support of Princeton in his anticipated candidacy for clerk and recorder of the county, abandoned his fight for Concord Church.

*Judge J. H. Miller states that of a total 1,100 legal voters, less than 100 were allowed to vote.

**The court house built at Princeton in 1839 was burned by the Confederates under Jenifer in 1862.

In January 1870, a committee of safety, organized at Princeton to devise a plan by which the vexed county-seat question could be terminated without danger of another removal, decided to secure from the legislature a special act submitting the question to the people of the county for settlement by a mere majority vote. In order to get such a law passed, Mr. Benjamin White acting for the Princeton people who furnished the money to pay his expenses, quietly mounted his horse, pushed over the mountains to the Kanawha, took passage on a steamboat to Wheeling by the Kanawha and Ohio rivers, accomplished his purpose, and returned before the people of Mercer learned of his activities.

After much dissension and discussion among themselves, the committee of safety determined to postpone the special election under the special law until September just before the regular state election, and meantime to get control of the registration board and register all the ex-Confederates who would vote for Princeton, and thus also get their names on the eligible lists for the state election. Later the committee managed to get control of the board of registration by the resignation of one of the members who, after resisting previous attempts to control him, fell into a trap set for him with the knowledge and aid of a personal friend of the governor (Mr. George Evans) who at once proceeded to Charleston and secretly secured from the governor the appointment of a successor in the person of Mr. Davis, a Democrat who had held office as a Republican. Thus constituted, with a majority favorable to Princeton, the board appointed liberal district registrars who actively hunted and registered all white male citizens over twenty-one years of age.

The people of Concord Church, aroused over the local question, and over the misplacement of the book containing the names of the voters of Plymouth district in which Concord was situated, were so anxious to wreak vengeance on their opponents in the county seat question that they were willing to put in jeopardy the chances of shaking off their civil and political shackles. Apprehensive of the supposed plan to register every ex-Confederate and overthrow the Republican party they informed Major Cyrus Newlin (a partisan Republican lawyer of Union) who instantly wrote to the governor inducing an investigation. Mr. A. F. Gibbons, whom the governor sent to investigate, was met with open arms by the people in favor of Princeton, and was assured that all would vote for Stevenson if the books were not blotched with erasures. Although Mr. Gibbons was wary and forced the committee to eliminate about two hundred names of the most

prominent ex-Confederates from the lists, Princeton still had names enough for her purpose.

In the meantime, the Concord Church people sent a messenger to the capital to secure an injunction prohibiting the officers from opening the election polls. Princeton sent after him their messenger who, starting twenty-four hours later, outrode him by two hours.

After the refusal of the judges to grant an injunction, the county seat question was easily settled at the election by a majority vote of over 400 in favor of Princeton. At the same time, the entire Democratic ticket was elected.* The county authorities immediately began to erect on the old court-hourse foundation a new building which was completed in 1875. The feelings of the people at Concord were somewhat mollified by the establishment of a normal school there, by act of February 28, 1872.

Closely related to the double struggle in Mercer county was the formation (in 1871) of Summers county—a child of necessity whose creation, first agitated as a result of the prospective completion of the Chesapeake and Ohio railroad, and urged to relieve inconveniences of communication with the court houses of Greenbrier, Monroe and Fayette, was largely due to several selfish disputes of older settled communities, and was strongly opposed by a large majority of its own original citizens. It happily settled the disputes of other counties. To secure desired ends the Princeton committee of safety joined with men such as Hon. Sylvester Upton, who after election to the legislature voted for the erection of the new county, which by including two districts of Mercer forever destroyed the hopes and aspirations of Concord Church to become the county seat. Senator Allen T. Caperton of Union (the county seat of Monroe) also enlisted his influence in favor of the new county which absorbed from his county some of the lower part which had long agitated the removal of the court house from Union to Centreville (now Greenville). The delegate from Fayette was glad to contribute from his county a slice to weaken the upper end which for years had agitated the question of removal of the county-seat. Greenbrier, which had plenty of territory, was glad to get rid of what was regarded as bare and isolated territory, forty miles from her court-house and not worth the expense of collecting the taxes and enforcing the laws.

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*Meantime, in the legislature of 1870, charges were filed against Judge Harrison and a petition presented requesting his removal from office on grounds of misconduct and neglect of duty. The charges of misconduct included corruption, intoxication, gross licentiousness, and oppressive and vindictive use of his judicial power. The trial, for which all preparations were made, was prevented by resignation of the accused, which was accepted by the governor.

The failure to include part of Raleigh in the new county was due to an agitation to remove the Raleigh court-house from Beckley to Trap Hill, which might have won if the Richmond District (friendly to Beckley) had been added to Summers. The clause which Moses Scott inserted in the bill for organizing Summers, preventing the inclusion of any part of Raleigh, left the new county with less than the area of 400 square miles required by the constitution—although Evan Hinton and J. H. Ferguson arranged for extending the lines in Greenbrier and Monroe, leading to the legal territorial and boundary disputes of 1894.

The legislative provision locating the county seat of Summers at the mouth of the Greenbrier was later the source of a quarrel which was never settled by the courts. The first court house was the old log Baptist church two miles up New river from Foss. At the date of its formation, the county had but few roads. The most important were the Red Sulphur and Kanawha turnpike, and a road leading up New river.

Coincident with the formation of Summers county under the lead of Evan Hinton, there was a counter-movement to create a county including practically the same territory with its county-seat at New Richmond.

X. The Constitution of 1872

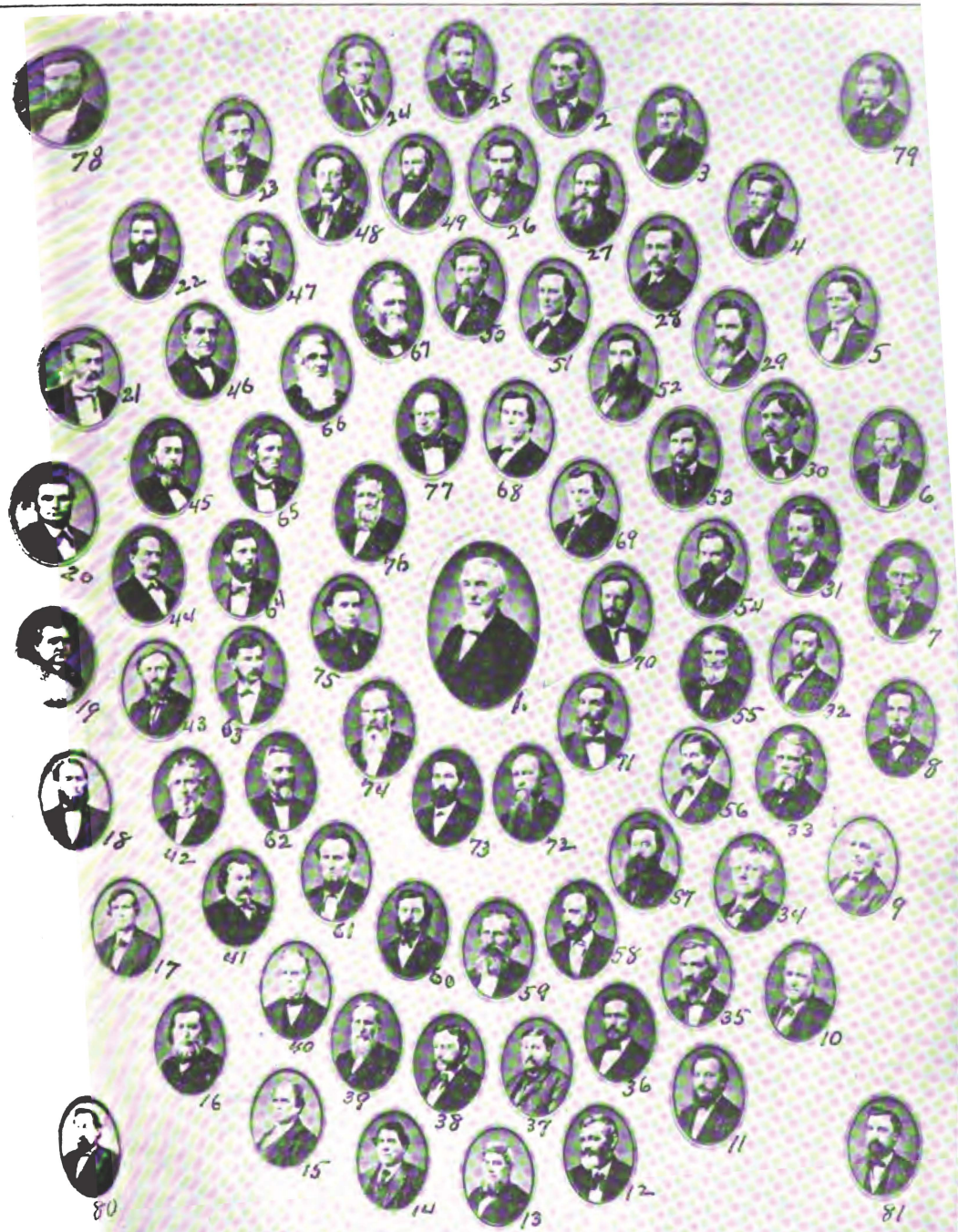
MOTIVES IN CALLING THE CONVENTION.

After the passage of the Flick amendment which accomplished the enfranchisement of the ex-Confederates, an object for which the Democrats professedly had striven for five years, further amendment to the constitution seemed unnecessary to many. However, the strong reactionary elements within the Democratic party, interpreting the attitude of the liberal Republicans on the amendment as a sign of weakness, desired to put the opposition party completely to rout—or, as the Wheeling Intelligencer said, they were not willing to wait until the corpse of the Republican party was decently buried "but must administer on the estate at once"—and for this purpose demanded a constitutional convention. Their strength is shown in the legislature which on February 23, 1871 passed a convention bill.*

The most radical advocates of the convention, (many thought), were apparently resolved to restore pre-bellum conditions as far as possible. In their zeal to make war on the state constitution they constructed various ingenious complaints against it. The Wheeling *Register* first objected (July 26, 1872) to it on the ground that a reapportionment could not be made under it without diminishing the existing representation of some of the counties, and later (August 11) on the ground that a new constitution was necessary to extend the time in which the Virginia debt should be paid. The Democratic papers and various stump speakers emphasized the point that the constitution of 1862-63 was adopted without the consent of the whole people—at a time when many were in the Confederate army; and when many others, refusing to recognize the reorganized state authority, had not participated in the election. Some, who were jestingly called "Democratic protectionists" were accused of wanting a convention to frame a constitution

*Among those most prominent in urging the need for a convention were Judge Ferguson, Colonel B. H. Smith who led a large meeting at the capital, and Hon. C. J. Faulkner who was the leading spirit of a similar meeting in Martinsburg.

Among those who took the lead in opposing the convention by articles in the press was Granville Parker, who feared radical changes in the organic structure and believed that any needed change could best be accomplished by amendments. He especially opposed the proposition of politicians to knock out the existing judicial and township system, claiming that their abrogation would necessitate a complete change of the new code which had been prepared at an expense of $100,000. He also feared that the radicals who proposed to abolish the free school system and the ballot would remove constitutional restrictions which prevented the legislative log-rolling that had bankrupted the old state under the pretext of making "internal improvements." He desired no radical changes which would lessen the good opinion and confidence of capitalists and business men who were so essential to the future of the state.



MEMBERS OF THE CONSTITUTIONAL CONVENTION OF WEST VIRGINIA, 1872.

List of Members of Constitutional Convention of 1872, with key numbers corresponding to those in accompanying reproduction from orignal photograph

10. ALLEN, LEWIS.
75. ARMSTRONG, JAMES D.
6. ARNETT, U. N.
45. ATKINSON, JOHN H.
65. BASSEL, JOHN.
64. BEE, ISAIAH.
37. BOGGS, CHARLES D.
40. BROWN, WILLIAM G.
39. BYRNE, BENJAMIN W.
42. BYRNSIDE, JAMES M.
5. CALFEE, JAMES.
52. CAMPBELL, ALEXANDER.
22. CORE, W. G. H.
11. CRIM, JOSEPH N. B.
23. CRISWELL, HANSON.
27. CUSHING, ALONZO.
63. DAVENPORT, GEORGE O.
10. DICKINSON, HUDSON M.
50. FARNSWORTH, DANIEL D. T.
77. FAULKNER, CHARLES J.
2. FERGUSON, CHARLES W.
3. FERRELL, THOMAS.
71. FITZHUGH, NICHOLAS.
56. GALLAHER, JOS. W.
38. HAGANS, J. MARSHALL.
30. HALL, SEPTIMIUS
49. HARDING, J. F.
69. HAYMOND, ALPHEUS F.
24. HAYNES, WILLIAM.
41. HOGE, JOHN BLAIR.
35. HOLT, HOMER A.
62. JACKSON, BLACKWELL.
72. JACKSON, J. M.
60. JOHNSON, DANIEL D.
57. JOHNSON, OKEY.
8. KANTNER, CHARLES.
53. KNIGHT, EDWARD B.
26. LEONARD, DAVID H.
43. LURTY, BEVERLY H.
61. MARTIN, BENJAMIN F.
66. MASLIN, THOMAS.
58. MATHEWS, HENRY MASON.
46. MCCLEARY, ANDREW W.
47. MCCREARY, WILLIAM.
51. MILLER, WM. W.
32. MOFFETT, GEORGE H.
14. MONROE, ALEXANDER.
25. MORGAN, WILLIAM A.
67. OSBURN, LOGAN.
44. PANNELL, A. J.
4. PARK, THOMAS R.
16. PATE, WILLIAM D.
7. PEERCE, JOHN T.
74. PENDLETON, WILLIAM K.
36. PIPES, JAMES N.
1. PRICE, SAMUEL.
12. PRINCE, WILLIAM.
31. PUGH, DAVID F.
9. RANDOLPH, JEPTHA F.
48. ROBINSON, JOHN S.
29. ROBERTS, D. A.
54. SMITH, FONTAINE.
18. SNIDER, JOSEPH.
15. STATON, M. A.
20. STRICKLER, JACOB P.
13. STUMP, LEMUEL.
28. THAYER, A. H.
33. THOMPSON, JOHN J.
17. THORNBURG, THOMAS.
70. TRAVERS, WILLIAM H.
34. WAGGENER, C. B.
59. WARD, EVERMONT.
21. WARTH, JOHN A.
76. WHEAT, JAMES S.
55. WILLEY, W. T.
73. WILSON, BENJAMIN J.
68. WOODS, SAMUEL V.
78. BUTCHER, G. J., *Secretary.*
80. CUNNINGHAM, JACOB V., *Sergeant-at-Arms.*
79. GALLIGAN, B. A., *Assistant Secretary.*
81. WETZEL, *G. F., Doorkeeper.*

which would provide protection against the consequences of engaging in future rebellion. All the advocates of the convention were most emphatic in expressing their wish to abolish the township system, which they claimed was a new and expensive importation from the northern states. They desired to restore the old county-court system, and many proposed to abolish the ballot and to restore viva voce voting. Some frequently hinted that too many people were voting, and that some property qualification should be adopted to disfranchise the negro population and some of the poor whites. Others, who fiercely denounced the court of appeals which had sustained the constitutionality of the proscription laws, at the same time criticised the constitution because it gave to the legislature the power to remove judges. But perhaps the most unique argument in favor of a new constitution appeared in the *Martinsburg Statesman* whose editor, apparently unconscious that the thirteenth and fourteenth amendments had preceded the fifteenth amendment to the constitution of the United States, declared in bold type, perhaps only for negro consumption, that under the existing state constitution slavery could still exist in West Virginia after the repeal of the fifteenth amendment by Congress, which he expected to be done soon; and he undertook to inform the colored voters that if they should oppose the call for a convention they would be voting to retain a constitution which still recognized them as slaves.

On August 24, 1871, the people determined the question in favor of a new constitutional convention by a vote of 30,220 to 27,638 (17,571 not voting). All the largest centers of population except Martinsburg voted in the negative. The big majorities for the convention were from localities in which there was a large ex-Confederate element, the counties of Jefferson, Hampshire, Hardy, Greenbrier, Logan, Gilmer and Braxton.

The Democratic strength was again shown in the following October when the Democrats elected 66 of the 78 members of the convention. The twelve Republican members were humorously called the "twelve apostles."

WORK OF THE CONVENTION. CHIEF PROVISIONS OF THE CONSTITUTION.

Meeting on January 16, 1872, the convention remained in session for eighty-four days at Charleston, then a village with unpaved and unlighted streets and shut off from the mails for three days at a time. It declined to accept the invitation to adjourn to Wheeling with free transportation. The radicals felt that nothing good in the shape of

constitutional reform could be accomplished in that "iron hearted city," in which had been framed the first constitution to which they were so strongly opposed; and many no doubt were influenced by the fact that the "best livers of Charleston" had thrown open their homes to the members of the convention who would have been compelled to seek boarding houses in Wheeling.*

Strong efforts made by the most radical reactionaries to keep West Virginia under the influence of the life and institutions of Virginia and the South were resisted by the more moderate members. On January 20, Mr. George Davenport, a liberal young Democrat from Wheeling, wishing to indicate that the Union Democrats were unalterably opposed to the manner in which the ex-Confederates were "running the convention," presented a sarcastic resolution requesting that the names of Grant and Lincoln counties should be changed to Davis and Lee. A few days later, some radical members made themselves rather ridiculous by opposing the first provision of the constitution which declared that the constitution of the United States is the supreme law of the land. Ward, of Cabell, on this question announced that he believed in the reserved rights of states; and Col. D. D. Johnson of Tyler objected to the clause because it ignored the "heaven born right to revolutionize." After the early sessions of the convention, the efforts of the more radical reactionaries were somewhat neutralized by the more liberal Democrats who feared that the ex-Confederate element of the party would force into the constitution provisions which might defeat it before the people. Some, observing how vigorously many members rode the hobby of economy, feared they would adopt a constitution intended not so much to benefit the people as to save money. The radical as well as the economic spirit of the members was shown in the great "squabble" which arose on January 22 after Mr. Farnsworth of Upshur made a customary and appropriate motion that the United States flag should be placed over the convention hall while the convention was in session.*

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*A complete file of the Kanawha *Daily* (the only daily published in Charleston during the convention), containing the most complete account of the debates that can be found, is in the possession of the Department of Archives at Charleston.

*After Farnsworth's motion, Ward, who it was jocularly said was perhaps best known for his magic ointment and scalpwash, moved to strike out "United States flag" and insert the "flag of West Virginia," arguing that his first allegiance was to his state. After a futile attempt to lay on the table, Farnsworth's motion was adopted, but the weighty question was reconsidered on January 24, and 25 when Col. Johnson wished to amend the resolution so that it would provide for inscribing on the flag the words "West Virginia rescued from tyranny." "In 1861," interjected Hagans, who rose from the opposite side. But while various members were debating over the probable expense which would be incurred by the purchase of a flag, Mr. Henry Pike who, looking after coal land in that region, happened to be present, solved the question by offering a flag as a gift to the convention. Whether or not Pike's offer was made out of pure gennerosity or not, the convention accepted it, voted its thanks to Mr. Pike, and ordered the sergeant at arms to raise the flag

The new constitution exhibited the marks of the period of partisanship which preceded it. Due to this feeling was the insertion of Section 3 of Article I which made martial law unconstitutional, the provision that no citizen should ever be refused the right to vote because his name had not been registered, and the clause prohibiting the legislature from ever establishing or authorizing a board or court of registration. Several new sections, quoted from the Virginia constitution of 1851 and introduced into the bill of rights—consisting of glittering generalities on the equality of man, the sovereignty of the people, the inalienable right of the majority and the repugnance of test oaths to the principles of free government—were introduced as finger boards to denunciate and anathematize the proscriptive laws of the Republican party.

The qualifications for suffrage under the clause of the constitution of 1862 was changed in two ways: (1) by the omission of the word "white" to make it conform to the fifteenth amendment, and (2) by increasing the period of residence in the district from thirty to sixty days. The proposition to omit the word "white"* from the clause on suffrage called forth long debate before it was finally carried. Mr. Martin of Taylor, expressing the hope that his arm might be palsied in any attempt to strike out the word "white," said that, with the exception of those who had been re-enfranchised by the Flick amendment, the legal voters were "carpet baggers, negroes, mulattoes, Chinese, Dutch, Irish, coolies, Norwegians, scalawags with a few of the native population of the country." It was his purpose, he said, to give the latter more protection. Mr. Thompson, of Putnam desired to cut off "that hideous tail" to the constitution (the fifteenth amendment); and, to provide for an emergency remedy, he urged the retention of the word "white." He did not consider that the negroes, who he said claimed every species of artificial rights in addition to natural rights, were quite as capable of self government as the buffaloes of the plains which had only their natural rights to protect.

Different views in the convention, in regard to the best method for the expression of the popular vote, resulted in a peculiar provision which exists in no other state and which leaves the voter free to select open, sealed or secret ballot. The opposition to the secret ballot was strong. Ward asserted that the ballot system had given a great deal

over the convention. On February 19, the flag arrived and, after it was seized upon frantically by the "twelve apostles," and kissed by some of them, it was hoisted over the convention hall.

*Although the constitution makes no distinction between white and colored in the exercise of the elective franchise, nor in the holding of office, it provides that white and colored children shall not be taught in the same school.

of trouble to the world. Samuel Price, of Greenbrier, lieutenant-governor of Virginia during the Cenfederacy and president of the convention, joined Ward in declaring that the people of their counties favored the *viva voce* system of voting. Mr. Martin, with face toward the flesh pots of the East, lamented that although fifteen years before in old Virginia the right to vote had been regarded as the most sacred one known to man," now-a-days the voter sneaks up, drops a little slip of paper through a hole in a door and then goes away lively as though he had done something he was ashamed of." All the more liberal Democrats however, fearing that a provision for *viva voce* voting would defeat the constitution, secured its defeat by a vote of 36 to 29. Twenty-four members insisted that at least the voter ought to be required to put his name on the back of his ballot, and were able to secure the compromise clause which was finally adopted.

The legislature was required to meet in biennial sessions of not longer than forty-five days, unless two-thirds of the members concurred in extending the session. The members of the house of delegates were chosen for a term of two years; and the senators, half of whom were elected biennially, were chosen for a term of four years. Representation was based on population. Although in a few instances the convention in laying out the senatorial and judicial districts was accused of gerrymandering, the larger state papers do not reflect any serious discontent. The list of persons debarred from seats in the legislature was enlarged by the inclusion of persons holding lucrative offices under foreign governments, members of congress, sheriffs, constables or clerks of courts of record, persons convicted of bribery, perjury or other infamous crimes, and all salaried officers of railroad companies.

On the latter debarment, peculiar to West Virginia, there was much debate. The attitude toward railroads at Charleston had greatly changed in the ten years since the convention in Wheeling in which VanWinkle of Wood, advocating the dropping of bank officers from the disqualified list, had clinched his argument and won the convention by saying that it might just as consistently proscribe railroad officers as bank officers. The growth of railroad influence produced anti-railroad sentiment in some sections. It was sneeringly said that the state should be called the state of the Baltimore and Ohio Railroad. Farnsworth, whose policy was to grant to big corporations no liberal franchises which worked to the detriment of land owners, declared his fear that the entire state would soon be under the control of the Baltimore and Ohio railway which by means of its through connections, he said,

diverted to the west the immigrants who otherwise might stop in West Virginia. Among those who opposed the disqualification of men who had been active in improving means of locomotion was Mr. Hagans who—after recalling the times not so remote when the people of the trans-Allegheny region had carried deer skins on their backs to Philadelphia and had drunk sassafras tea six months of the year because they could not get store tea—said that without railroads residence in West Virginia would be about as desirable as residence at the North Pole.

The legislature was forbidden to pass special acts in a long list of additional cases including the following: the sale of church property or property held for charitable uses; locating or changing county seats; chartering, licensing, or establishing ferries; remitting fines, penalties or forfeitures; changing the law of descent; regulating the rate of interest and releasing taxes. The state, in addition to the prohibition of 1863 which prevented it from holding stock in any bank, was prohibited from holding stock in any company or association in the state or elsewhere, formed for any purpose whatever. The only new power given to the legislature (a power which remained inoperative for thirteen years) was that of taxing privileges and franchises of corporations and persons, which in the constitution of 1863 had been withheld largely through the fear that a corporation tax would discourage corporate capital which was then so much needed to build up the new state.

The governor and all the executive officers were to serve for four years; and, with the exception of the secretary of state, were to be elected by the people. No provision was made for a lieutenant-governor. In case the governor was unable to act, the duties fell upon the president of the senate or the speaker of the house; and, if neither of the preceding persons should be qualified, the legislature was given the power to appoint—unless the vacancy should occur in the first three years of the term, in which case an election by the people was required.*

The judicial system, which was entirely reorganized, consisted of a supreme court of appeals, a circuit court, county and corporation courts and justices of the peace. The supreme court of appeals, a rotary body consisting of four judges elected by the people for twelve years, could render no decision which should be considered as binding authority upon any inferior court except in the particular case decided unless the decision was concurred in by three judges. The number of circuits was fixed at nine and a provision forbade the

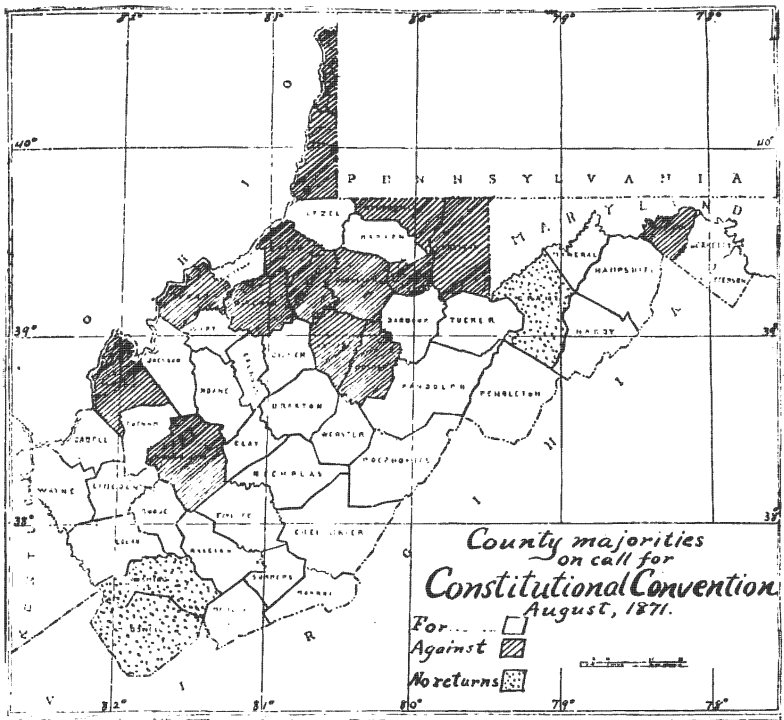
*This provision is peculiar to West Virginia.

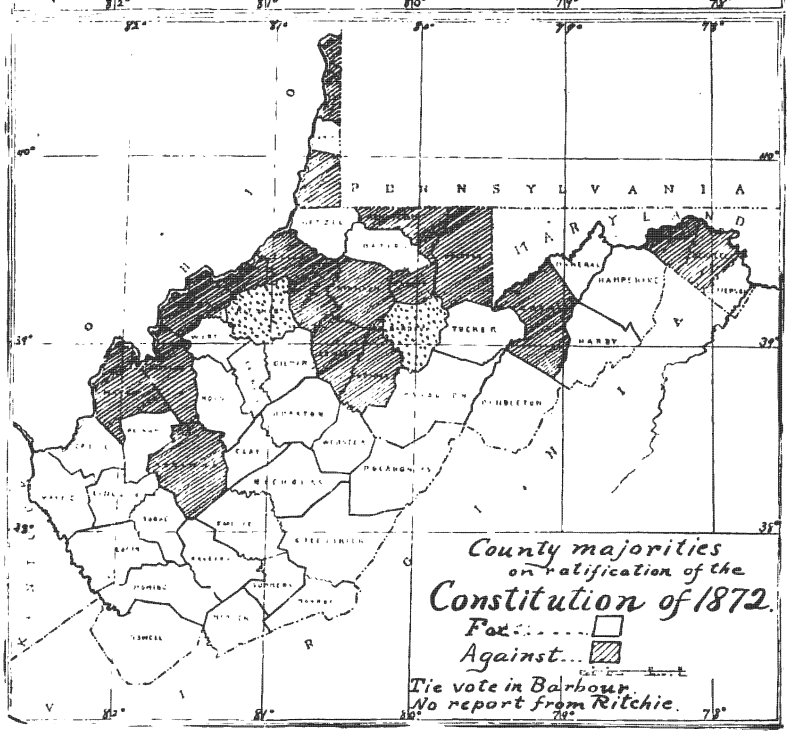
legislature to increase that number until after 1880. After much debate, in which Osborne humorously suggested that there was no way out of the difficulty but to put the office up to the lowest bidder, the salary of judges of the supreme court of appeals was raised from $2,000 to $2,250 and of circuit udges from $1,800 to $2,000.* Abandoning the township system, the convention reestablished the old county-court system composed of a president and two justices with its police, fiscal and judicial powers. This court was eulogized by Mr. Haymond of Marion as the guiding star to younger members of the profession, the "theater upon which their youthful geniuses might disport with gay freedom before the assembled people." Hagans answered this speech by suggesting that it would be far better if these young lawyers were safely housed by the state in some law-school where they would not afflict the public with such a "fraud as the farce known as the county-court of the olden times." He continued by declaring that it was cruel, and almost criminal, to impose on men who had never read a law book in their lives the delicate and difficult tasks of adjusting the complex questions that arise in the suits that come before them. He had learned, he said, that the hapless suitor whose attorney could not boast of gray hairs could almost copy the inscription over the inferno, "He who enters here leaves hope behind," and rewrite it at the threshold of the august forum of the county court, for it mattered not how ably a case might be put by the young lawyer, nor how much law he might bring forward to sustain it until it appeared as clear as a sunbeam, the "venerable and foxy lawyer" had but to refer to the "youth and inexperience of his young friend" and close with a few well chosen and hackneyed expressions about the "good sense" and profound judgment of the court, when lo! the heads went together for an incredibly short time and with a wave of the hand it was "Judgment for the defendant, Mr. Clerk."

Although the question of the Virginia debt arose in the convention, and although Mr. Willey advocated the adoption of some addition to the clause of the constitution of 1863, relating to it so that there would remain no shadow of a question as to West Virginia's intention to assume her equitable proportion, the constitution omitted the entire clause. This was regarded by many as repudiation.

The antiquated clauses of the constitution which relate to the for-

*In the convention of 1861-62 Harmon Sinsel, urging the strictest economy in the finances of the new state and stating that respectable families could live on $500 a year, advocated small salaries for judges partly on the ground that men liked the honor of the office.


PENNSYLVANIA
MARYLAND
County majorities
on call for
Constitutional Convention
August, 1871.
For
Against
No returns


PENNSYLVANIA
MARYLAND
County majorities
on ratification of the
Constitution of 1872.
For
Against
Tie vote in Barbour.
No report from Ritchie.

feiture of land may be regarded as a monument to a mistake of the dead but living past.* Originating with a purpose to quiet titles and reduce litigation, they are still a prolific source of expensive litigation; and lawyers familiar with the abuses and objectionable features of their operation have recently advocated their abolition in the interest of a less complex system of land laws, if this can be done with injustice to none and without unsettling land titles.

The clause of the constitution of 1863, requiring that an amendment proposed by one legislature must be approved by the next before it could be submitted to the people, was omitted from the constitution of 1872.

Although the new constitution, which was ratified by a majority of only 4,567 in an aggregate vote of over 80,000, made some wise changes—lengthening the terms of members of each house of the

*West Virginia at the beginning of her history inherited the confusion of land titles which had resulted from the mistakes made by the mother state in the early years of our national existence when she had urgent need of revenue to support her government. The earlier failure to secure either revenue or much desired barrier settlements in the west, by the statute of 1779 which placed public lands on the market at a fixed charge of forty pounds for each one hundred acres (a price which proved too high for the hunter-farmer of the frontier, induced the legislature in December, 1792, with the expectation of increasing revenues from land taxes, to offer western lands for sale at the merely nominal price of two cents per acre—an offer which in the next decade resulted in the acquisition of almost all the territory of western Virginia, principally in large grants often reaching a million acres in a single tract, by speculators who neither became residents on the land nor paid taxes thereon. Much confusion resulted from the methods by which the grants were located. Without adequate returns from the lands to enable her to supervise the location and survey of the lands sold, the state allowed every buyer to establish his own boundaries (!); and later, when she reluctantly and gradually entered upon the policy of forfeiting titles for non-payment of taxes, she first found many boundary disputes and subsequently discovered that many tracts had never been entered upon the commissioners book for assessment. Finally, forced by the stern fact that the settlement of western Virginia by those who were willing to brave the dangers and bear the inconveniences of the frontier, was retarded by the fear of the insecurity of ownership of soil upon which settlers might erect their humble homes, the Virginia legislature in 1831, and in 1835, passed two acts which provided for the forfeiture of titles returned delinquent (and not redeemed) and for the protection of pioneer settlers—acts which were the lineal ancestors of sections three and six of article twelve of the West Virginia constitution of 1872. The Virginia legislature, though it showed a growing tendency to forfeit titles for non-payment of taxes and to favor pioneer settlers who paid the taxes, hesitated to forfeit a title absolutely; and from time to time it passed numerous acts granting former owners of forfeited lands additional time to redeem them, and it never transferred a title to a claimant who had no claim of title derived from the commonwealth.

West Virginia in her first constitution adopted the growing policy of the mother state in regard to forfeitures, and again temporized with the delinquent tax payer, but made a distinct advance by a provision which for the first time showed a disposition to favor the owner of a small tract whose delinquent taxes did not exceed $20. In a statute of 1869 her legislature provided for the proper entry of all land and imposed forfeiture as a penalty for failure to enter land on the books for a period of five years, but allowed the owner to redeem it within a year. The members of the convention of 1872 inserted in the constitution provisions which prevented any further temporizing with the question of forfeiture of tracts of unassessed land containing 1,000 acres or more and extended the transfer of a forfeited title to persons who had actual possession for a term of years and had paid taxes charged on the land for five years. In 1873 an act of the legislature (still in force) provided for the forfeiture after five years of all tracts of nonassessed land of less than 1,000 acres. The tendency of this system to breed litgation is well illustrated by the fact that there were recently on the docket of the circuit court of McDowell county thirty-seven suits by the state for the sale of forfeited lands, and in the larger part of these suits there were from ten to thirty tracts of land involved. These suits frequently resulted from the efforts of individuals who took an unfair advantage of the forfeiture clauses of the constitution in the litigation of their claims. They imposed upon the state the burden of proof, and they assumed no responsibility for the costs of the suits. The parties behind this litigation, in many cases, would have had no standing in court if forced into a suit in ejection.

legislature and providing for biennial legislatures—it contained several restrictions and inhibitions and imperfect provisions which have retarded or prevented governmental adjustments, and have been criticised by leading men of both parties. Although some of these have been changed, others still remain.

AMENDMENTS.

Amendments have been submitted and ratified by the people at several different times. The first effort to appease the clamor for amendments was made in 1879 when the legislature proposed two amendments: (1) an entire revision of the article on the judiciary, increasing the number of circuit courts from nine to thirteen, authorizing a further change in the number after 1885, increasing the number of terms of the circuit court in each county from two to three each year and abolishing the county court system but still retaining the name for its successor—a police and fiscal board of three commissioners for the administration of county affairs; (2) a change in Section 13 of the bill of rights, providing for a trial by a jury of six in suits at common law before a justice when the value in controversy should exceed $20.* In 1883 the legislature submitted the amendment, changing the time of state elections so as to coincide with the day on which the federal elections are held.

With a hope of removing or reducing the many evils which still existed, the legislature of 1897 appointed a non-partisan (bipartisan) joint committee to suggest needed revisions of the state constitution. In an elaborate report, this committee suggested many needed changes, some of which have since been adopted. In 1901 the legislature proposed amendments which were ratified by the people, limiting the invested school fund to $1,000,000, requiring the legislature to provide for the registration of all voters, making the office of secretary of state elective under the same provision as the other state executive officers, providing that the salaries of all these officers shall be established by statute and that all fees liable by law for any service performed by these officers shall revert to the treasury, **and increasing

*The working of justices' jury has not always been satisfactory. In 1897, after sundry decisions of the supreme court, the legislative committee on the revision of the constitution, in order to avoid the necessity of recording evidence in a jury trial before a justice or of taking bills of exceptions to the ruling and conduct of the justice, and with the idea that the judgment of a justice upon the verdict of jury should not be final and binding as the judgment of a court of record upon a verdict in such court, proposed to aid to Section 13 of the bill of rights a provision in such case for an appeal to the circuit court for re-trial, both as to law and fact, under such regulation as the legislature might prescribe.

**This turned a considerable sum into the treasury. The fees derived from the office of secretary of state and auditor were variously estimated from $10,000 to $15,000 per year. The committee also suggested amendments providing for the

the number of members of the supreme court of appeals from four to five—whose salaries, together with the salaries of the circuit judges, were to be fixed thereafter by statute instead of by the constitution. In addition to the adopted amendments which had been suggested by the legislative committee, the people in 1908 voted upon two proposed amendments—one of which proposed to increase the pay of commissioners of the county court in order to secure more competent men, and the other to amend Section 4 of Article IV, of the constitution so that it would no longer prohibit the appointment to office (state, county or municipal) of persons (women) who are not citizens entitled to vote in the state. Both were rejected. In the election of 1910 another attempt to amend Section 4 of Article IV failed. At the same election an attempt to amend the constitution, increasing the number of members of the supreme court from five to seven was defeated. In 1912, an amendment to prohibit the manufacture and sale of intoxicants in the state after July 1, 1914, carried by more than ninety-two thousand majority. In 1913, an amendment creating the office of lieutenant-governor *passed both houses of the legislature; but no statute was passed submitting this proposed amendment to the people, and unless later provision is made by a special session of the legislature it can not be submitted at the next election.

The committee of 1897 proposed other desirable amendments; but as yet, although there seems to be a general demand for many of them, the legislature has not acted. Among these proposed amendments, for which there seems to be a general demand, is one providing that legislators shall receive $4.00 a day for actual attendance for a period not to exceed sixty days, at a regular, and forty days at any special session; and another providing that, in order to secure more deliberate consideration of bills, no bill may be introduced into the legislature after the fortieth day of the session. The committee felt that the provision which limits the jurisdiction of inferior courts to

election of a county treasurer to collect the taxes of the county, and for the payment of salaries to the county officers in place of fees, which should then revert to the treasury. Those in favor of the abolition of the fee system in payment of county officers urged that the fees amounted to more than a just compensation for the officer's services and more than he would receive if he were paid a fixed salary. they favored reduction in the cost of administering county government, which had become burdensome and oppressive to the people. The demand for reforms became so strong that the legislature in 1908 passed a county salaries bill. Notwithstanding the name of this bill, the fee system in payment of county officers is not entirely abolished, and there is much demand for complete abolition of the abuses that exist under the present system.

*The absence of any constitutional provision for a lieutenant-governor, which was considered an unnecessary office by the makers of the constitution, has several times caused much difficulty in the organization of the senate. The waste of time spent in balloting for a presiding office has been far more expensive than the smaller sum which would be necessary to pay the salary of a permanent presiding officer of the senate.

a single county should be made more flexible in order to meet the growing necessity of development. Therefore, it suggested that the creation of such courts should be left to legislative discretion and judgment. It also urged the adoption of a secret Australian ballot in order to prevent the great traffic in votes which has existed under the constitutional method of voting. To secure this it would be necessary to omit the antiquated clause which provides that "the voter shall be left free to vote by either open, sealed or secret ballot as he may elect." The committee also proposed to equalize taxation (1) by an exemption on real estate against which there was a lien for debt of purchase, (intended chiefly to benefit the farming class who were paying more than their fair proportion of the taxes), and (2) by giving the legislature power to tax "business" (in addition to privileges and franchises) with the special purpose of reaching the intangible property of corporations and large enterprises which had escaped taxation, or had paid only a small amount of their fair proportion estimated on the basis of wealth.

In recent years, there have been many expressions in favor of a constitutional convention to prepare a constitution more adequately adapted to present conditions and needs. In 1903, Governor White, suggesting the need of such a convention, said: "Our constitution creaks at almost every joint." Governor Dawson especially urged the need of reform in the size of the senate, which can be most effectively accomplished by a constitutional clause providing for county representation in the senate. There has been a growing feeling that the size of the senate should be increased so that each county may have a representative, and that there should be some early change in the present system of choosing senators under which it is possible for eight counties to control the majority of the senate. Both the legislative and executive branches of the state government have recognized the inadequacy of the present organic law as a means of solving modern economic problems relating to taxation and the proper regulation of public service corporations. Although the need of a new constitution has been more recently suggested by Governor Glasscock, and although many recognize that a constitutional convention would be the cheapest and surest solution of the problem—especially social, economic and fincial—which have resulted largely from the recent rapid industrial development of the state, many conservative leaders still prefer what they consider the less expensive method of "patchwork" amendments.

XI. The Industrial Awakening

1. GENERAL SURVEY.

"The political revolution of 1872 could not check the steadily growing economic revolution which, through the peaceful process of time, changed the industrial character of the state."

The vast resources* of West Virginia, whose development was so long delayed and retarded by lack of transportation facilities, have recently furnished the incentive for many new enterprises which have greatly changed the life of the region. The recent industrial development had its origin largely in the increasing demand for timber, coal, oil and gas, and to the resulting inducements for the construction of railroads and the establishment of certain manufactures, such as glass, iron and steel for which a portion of the region furnishes a clean, cheap fuel.

The development of agriculture as a skilled business in West Virginia was greatly retarded by the habits of the people, resulting from frontier conditions and long continued lack of transportation facilities. There had been little concentrated or co-operative action for improvement of agriculture before the war. Except in a few counties the people, remote from stores and destitute of means, were satisfied with production for bare subsistence and gave little attention to production for exportation. In the decade after 1850, agricultural societies were formed in a few of the most progressive counties, such as Marshall, Monongalia, Jefferson, Cabell and Ohio. There were few dealers in farm implements even at the close of the war. Although the first rude thresher made its appearance in 1840, and a thresher which separated the grain from the chaff appeared soon after 1850, the steam thresher did not come into use until about 1880. After 1880, there was a rapid introduction of all kinds of improved farm implements and machinery. Their value by the census of 1900 was over $5,000,000.

While in the cultivation of wheat, which was once a very profitable

*In 1876, at an expense of $20,000, West Virginia prepared for the Centennial exposition at Philadelphia an exhibit of her resources, which attracted the attention of the world and the investment of capital in the state. The West Virginia building was made entirely of the eighteen varieties of hardwoods of Marshall county. Among the many exhibits were large blocks and masses of bituminous coal, some of which had been hauled over fifty miles by ox teams before they could reach a railway station for transportation to Philadelphia.

industry in the older counties, West Virginia finds it difficult to compete in the markets of the world with the great wheat producers of the northwest, she can continue to increase her production of both wheat and corn for an ever increasing home market.

Since 1891, considerable advance in agriculture has been made through the influence of farmers' institutes, better communications, and various associations. In 1891 the legislature passed an act creating a state board of agriculture*, consisting of one member from each congressional district, appointed by the governor for a term of four years. It also adopted the policy of making annual appropriations to aid in conducting farmers' institutes and other work for promoting agricultural interests and industries. One of the earliest state associations for encouraging any branch of the farming industry was that of the West Virginia Sheep Breeders and Wool Growers, which was organized at Parkersburg in 1879. Several active associations, representing different branches of agriculture have recently been organized: the West Virginia Horticultural Society in 1894, the West Virginia Live Stock Association in 1901, the West Virginia State Poultry Association in 1901 and the West Virginia Dairy Association in 1904.

The recent preparation of conditions requisite for the full development of agriculture point to far greater advance in the near future.

Several counties annually ship many car loads of cattle for beef to eastern markets, and Harrison and Lewis export some of their finest cattle to England.

At the close of the war an awakened interest in the latent mineral resources of the region, and the investments of capitalists, indicated the beginnings of a new era of development. Coal mining companies were formed and coal mining operations were begun in Putnam, Boone, Wayne, Mason and Monongalia counties by 1869, in Marion in 1870, and in Sewell Mountain on New river in 1873. Operations were extensive in these counties and in Fayette, Harrison and Ohio by 1880, and at the same time embryo operations were begun in the coke industry which steadily increased after 1880, and especially after 1890 when machines were introduced for mining. In June, 1883 the first coal was shipped from the Flat Top Field. The valuable Pittsburg vein of coal was easily accessible along the Monongahela, especially cropping out above the water level in Monongalia, Marion, Harrison

*The board was organized in 1891 with T. C. Atkeson as president. In 1892 it began the publication of the Farm Bulletin which was soon suspended and in 1893 was succeeded by the West Virginia Farm Reporter which in 1898 was changed to the West Virginia Farm Review.

and Lewis counties. In 1903 there were 530 mines inspected in the state, and the total production was 24,000,000 long tons, of which nearly 19,500,000 tons were shipped to market. Coke burning which began in a small way as early as 1853 did not begin its rapid development until 1902. In 1911 West Virginia ranked second in coal productions. Her production of coal for the year ending June 20, 1912 was 59,581,774 gross tons, whose total value was $56,602,685.30. In the same year she produced 1,992,697 gross tons of coke with a value of $5,605,781.57.

Petroleum, first obtained in large quantities in 1860 on the Little Kanawha near Parkersburg, developed a thriving business which, although ruined by the Confederates in 1863, was revived in 1865* and greatly extended by operations in Wirt, Wood and Pleasants counties. From 1876 to 1889 there was little extension of productive area, but the yearly production which steadily declined in these years rapidly increased in the following decade—rising from 544,000 barrels in 1889 to 16,000,000 barrels in 1900, surpassing both Pennsylvania and New York. In 1910 West Virginia produced 11,753,071 barrels of oil, ranking fourth in production in the United States. In 1911 she produced 9,795,464 barrels, ranking fifth in production. The speculation in oil, although it ruined some, built fortunes for others. By means of a series of pumping stations constructed after 1890 the product was forced through pipe lines over the mountains to the seaboard cities.

After 1882, by the opening of new gas wells, and the discovery of new gas fields, the practical use of gas became a large factor in the industrial and social development of the state, furnishing the inducement for the location of many manufacturing establishments seeking cheap fuel. It also attracted immigrants desiring a clean and convenient fuel for their homes.

As early as 1821 a window glass factory was erected at Wheeling. In 1864 the cost of glass manufacture was reduced by one-half by the

*While excitement was high along Fishing creek in Wetzel county and in Tylor county, oil speculators and well-borers had already been attracted by indications of gas and oil along the tributaries of the West Fork in Lewis county and along the Pennsylvania boundary of Monongalia. Even in the Cheat river valley in Preston they were prospecting and purchasing with expression of confident expectations which materially increased the value of undeveloped tracts of land. Harrison county was affected by a strong show of oil on the head waters of Cabin run (a tributary of Hughes river) in Ritchie county, and became excited by an oil strike at a depth of 200 feet at Clarkeburg which resulted in the beginning of oil leases on town lots, cultivated farms and wild lands. In Taylor county, too, an oil strike was reported at a depth of 300 feet. Fortunately the mania for buying "shares" in unknown companies had somewhat subsided. Except in a few instances of wild investment in untested petroleum lands, prices continued to rise. In Monongalia county considerable excitement caused by the expectation of striking a rich oil field in the spring of 1861, and quieted by the intense excitement of the war, was revived in 1865.

discovery of a new process which is regarded as the second great improvement in this industry. As early as 1879 gas was used for fuel in the glass works at Wheeling. In 1900 it was used almost exclusively in all the glass works of the state. As a fuel in the manufacture of glass it has no equal. In 1870 there were in the state (at Wheeling) six glass works employing 860 persons with products exceeding $600,000 per annum. In 1890 there were seven establishments employing 1371 persons and with products valued at $945,234. In 1900 the number had increased to sixteen employing 1949 persons and with products valued at $1,871,795. In 1911 there were 28 flint glass factories employing 6033 persons and producing annually a product valued at $6,854,187; and 21 window glass factories employing 3153 persons and with an annual production valued at $3,467,622.

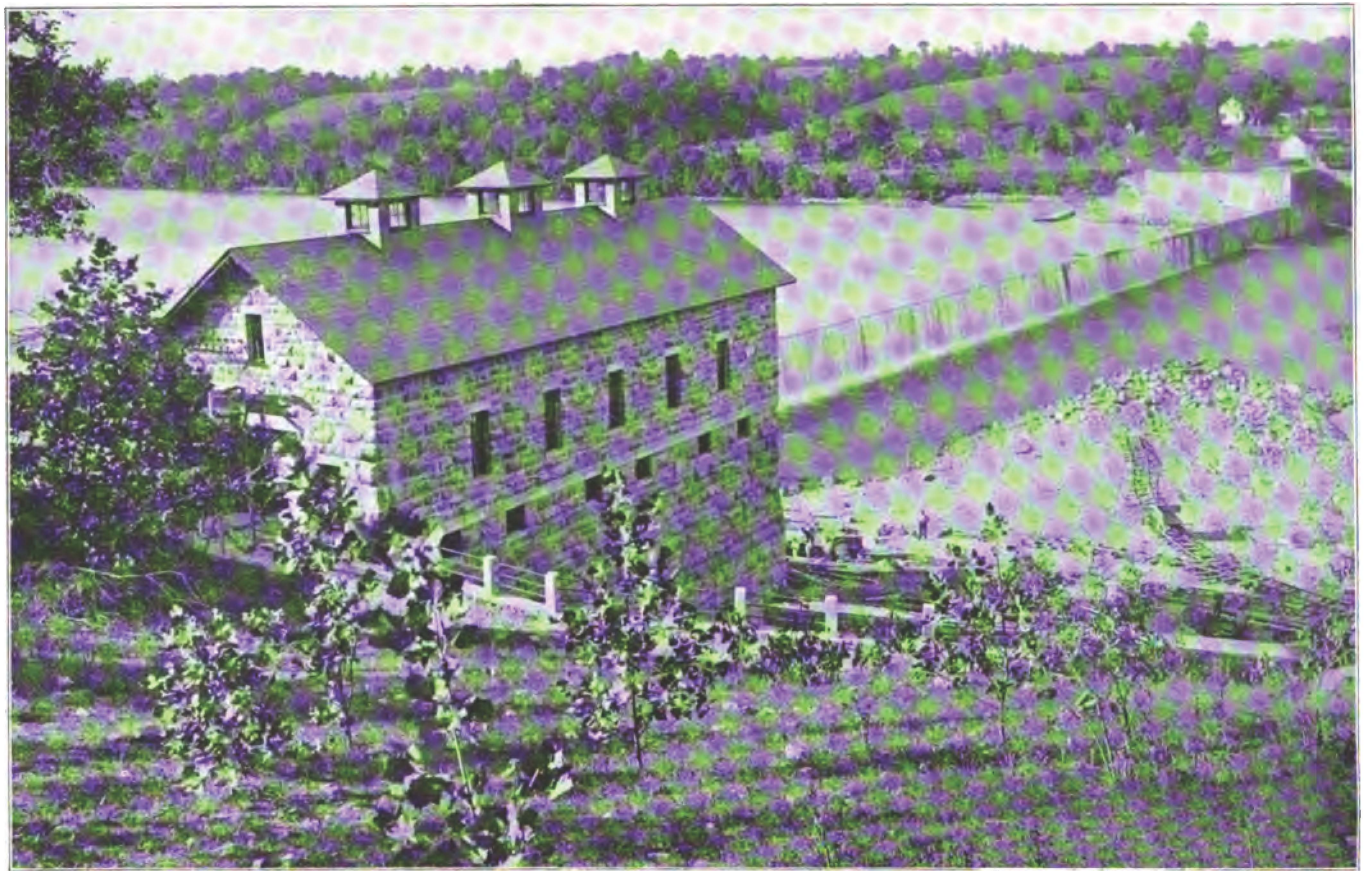
The timber industries became prominent by 1885. For many years after the civil war large rafts of logs were floated down Cheat and the Monongahela to Brownsville and lower points. Portable steam saws, introduced in some cases about 1860, became more numerous after the construction of railroads. The cross-tie industry had been prominent for many years. Lumbering (the lineal descendant of the earlier cutting and rafting of tan bark, hoop-poles and logs), although it developed little before 1865, ranked among the foremost industries in many parts of the state in 1900 and even at the close of the decade following.

Among other recent industries are brick works and tile works. In 1903 the Buckhorn Portland Cement company began the shipment of cement from a mill, with a capacity of 1200 barrels a day, located at Manheim on Cheat two miles below Rowlesburg. More recently cement mills have been established at Martinsburg and other points.

New forms of wealth are beginning to emerge in the opportunities for valuable water-power, which was scarcely utilized before 1870 except for grist mills and saw mills, and which in sections remote from rail or from navigable streams did not until recently enhance the value of the surrounding lands.

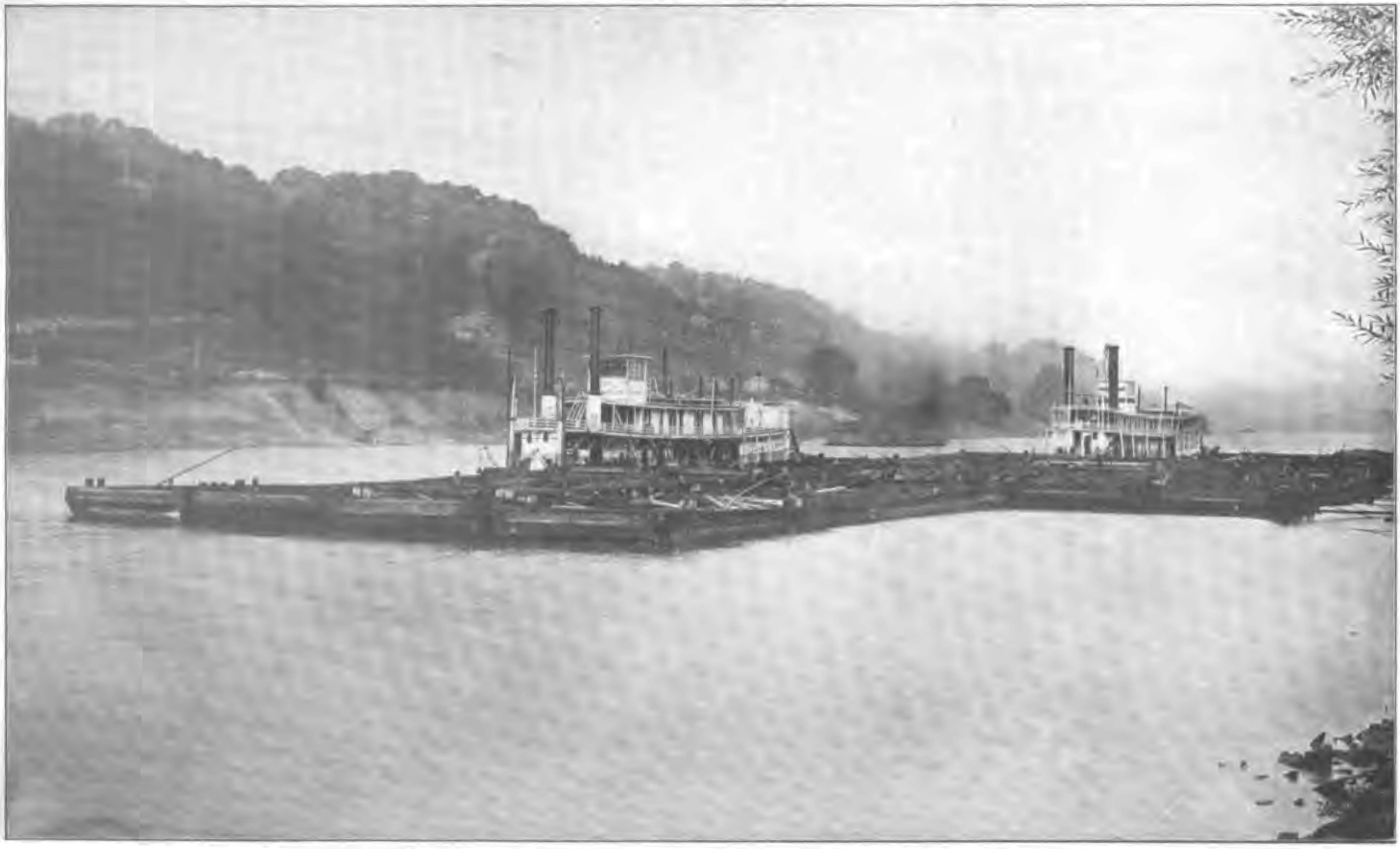
Bank facilities have been established on unusually good foundations. During the period of financial stringency in 1893 and 1907 the depression was not seriously felt in West Virginia. The large number of investments in the region, and the circulation of money necessary for their development, made money usually plentiful.

Both the census of 1900 and that of 1910 indicate a remarkable



Courtesy of W. Va. Geological Survey.

ELECTRIC WATER POWER PLANT ON THE POTOMAC (Morgan County).



TOW BOAT SCENE ON THE KANAWHA RIVER.

development of material wealth—including farm property, farm products, manufacturing plants, manufactured products, timber products, coal and coke production, bank resources and bank deposits and steam railways.

Industrial progress has been greatly influenced by corresponding development of means of transportation. When the state began its separate existence there were few facilities for communication in the larger part of its territory. Of the few turnpikes, the most important were the James river and Kanawha, the Winchester and Parkersburg ("Northwestern") and the Staunton and Parkersburg* which had been begun by Virginia to silence the rising murmurs of popular discontent west of the Alleghenies. South of the Great Kanawha, roads of any kind were few and in bad condition. Steamboat navigation except on the Ohio was confined to a few miles on a very few streams and was not yet satisfactory. There was but one railroad, the Baltimore and Ohio, whose immediate influence affected only a narrow strip of territory across the northern border of the state.

In 1873 Congress made small appropriations for sluice and wing dam improvement on the Great Kanawha, and two years later began appropriations for permanent lock-and-dam improvements which after a quarter of a century were completed to Montgomery above Charleston at a cost of over $4,000,000. In 1887 beacon lights were established on the Ohio and soon thereafter on the Great Kanawha. In 1872 Congress began appropriations by which slack-water improvements have been extended up the Monongahela to Fairmont.

The new government promptly took steps to encourage the construction of railroads. Of the many proposed railways chartered after 1864, several were completed by 1885. In 1871 the Baltimore and Ohio railroad purchased the old Hempfield railroad, in operation between Wheeling and Washington, Pennsylvania, and completed it to Pittsburg. In January, 1873 the Chesapeake and Ohio was completed westward from Sulphur Springs to Huntington.

A decade later, other new railway lines were in progress of construction. In 1884 the Kanawha and Michigan, a continuation of the Ohio Central, was opened from the Ohio river to Charleston, and

*A number of jointstock turnpikes had also received some appropriation from Virginia. The new state, relinquishing all rights in the chartered turnpikes in which Virginia had held an interest, turned them over to the counties for supervision and repair. While such turnpikes added to the facilities for travel in the most densely settled parts of the state, much expense and work was required to maintain them in good condition. The turnpike from Point Pleasant to Charleston was in a very bad condition at the close of the war. The Guyandotte and Covington turnpike via Charleston and White Sulphur springs was kept in fairly good condition for the daily stage line.

later it was extended to Gauley Bridge. In 1886 a line designed to connect the north central part of the state with Pittsburg was completed from Fairmont to Morgantown, from whence it was later (1895) extended to Connellsville, Pennsylvania, where it connected with a main line of the Baltimore and Ohio from Cumberland to Pittsburg. The Ohio river railway was completed from Wheeling to Parkersburg in 1885, and continued to Point Pleasant in 1886 and to Huntington in 1888. In 1892 the Norfolk and Western was opened to the Ohio, and in 1893 the Charleston, Clendennin and Sutton was put in operation up the Elk river from Charleston to Sutton, from which a new line was extended to Elkins by 1906. During the most active period of railroad construction in West Virginia, from 1896 to 1902, sixteen roads or branches were built, and by 1904 railroads penetrated fifty-one of the fifty-five counties of the state. After 1900 the rapid development of productive industries, and of transportation facilities was accompanied by great changes in every phase of life, industrial and social, political and educational. It caused a phenomenal growth of many towns, and great improvement of the conditions of life.

2. EVOLUTION OF RAILROADS AND INDUSTRIAL PROGRESS.

The development of railway systems in recent years created an industrial revolution, and the beginning of a great material development which is still in its infancy. The railroads opened communication with the markets of the world, and attracted capital to exploit rich coal fields and valuable timber lands. Every delay in securing transportation facilities postponed the day of prosperity. Every extension of railroads has resulted in great industrial and social changes, including large increase in the permanent population.

PROJECTED RAILROADS THAT FAILED.

In the decade after the war there were many projected railroads which failed through lack of capital. In 1864, the West Virginia Central was projected from the Pennsylvania Central line either via the Monongahela or via Brandonville, Grafton, Buckhannon, Sutton and Charleston to the mouth of the Big Sandy. In 1865, coincident with the revival of projects for a railway along the New river and the Kanawha, the Monongahela and Lewisburg railway company was incorporated to build a road beginning at the Pennsylvania state line and passing through Morgantown, and via Fairmont, Clarksburg and

Buckhannon to intersect with the proposed Chesapeake and Ohio and to give connection with the mineral deposits of the Virginias and the cotton fields of the South.

Other roads projected in rapid succession were: the Monongahela Valley (1868) from the Pennsylvania state line to Fairmont; the Uniontown and West Virginia (1869) crossing the Cheat near Ice's Ferry, thence via Morgantown; the West Virginia Central (1870) from the Pennsylvania line of Preston county to Charleston; the Pittsburg, Virginia and Charleston (1870) via Morgantown, to connect with the Baltimore and Ohio at Grafton; the Northern and Southern West Virginia (1870) from the Pennsylvania line via Clarksburg and Charleston to Wayne county; the Pittsburg, West Virginia and Southern Narrow Guage (1878) from Washington, Pennsylvania via Mt. Morris and Morgantown to Grafton; the West Virginia and Pennsylvania (1881) between the Pennsylvania state line and Clarksburg; and the Blacksville and Morgantown Narrow Guage (1882). The Pittsburg, Virginia and Charleston railway, originally chartered as the Monongahela Valley, reincorporated under the new name in 1870, was opened to Monongahela City in 1873, absorbed the Brownsville road (from Mt. Braddock) in 1881, opened the Redstone branch in 1882, but never reached West Virginia. In 1887 it was leased by the Pennsylvania railroad company which still operates it.

Much of the earlier activity in connection with projected railways in the northern part of the state was largely related to the interests of Monongalia and Preston counties, and especially to the interests of Morgantown, which had already obtained telegraphic communication with the world by a line erected between Pittsburg and Fairmont in 1866. In 1871 the legislature authorized the extension of the Iron Valley railroad (which was constructed from Hardman's, on the Baltimore and Ohio via Three Fork creek to Irondale). This extension was projected via Decker's creek to Morgantown and the Pennsylvania boundary. The legislature authorized another line from the Baltimore and Ohio near the mouth of Raccoon creek via Martin's Iron Works, the mouth of Green's run, Bruceton and Brandonville to the Pennsylvania boundary on the Big Sandy. In 1873 the legislature appropriated $1,000 for a survey in the general direction of the latter line with a view to connection with the Pittsburg, Washington and Baltimore railroad, but plans for financing the construction of the road failed. The county court of Preston, at that time prosecut-

ing an expensive suit against the Baltimore and Ohio for taxes, refused to submit to the people the question of a county appropriation to aid in building the road. After the improvement of the financial condition of the county in 1876, by the acceptance of $18,000 by compromise with the Baltimore and Ohio, interest in the proposed road declined. In 1877, the county court of Preston voted to submit to the people the question of subscribing to the capital stock of the proposed narrow gauge railway from the Baltimore and Ohio via Kingwood to Morgantown, but friends of the enterprise decided not to submit the proposition. In 1878, public meetings were held in Monongalia to encourage the construction of a railroad from Morgantown to Grafton.* After a period of "hard times" the earlier idea of a railway following Decker's creek from its mouth, and connecting Morgantown and Kingwood** with the Baltimore and Ohio at the point where the short railway from Irondale furnace tapped it, was revived in 1881 and a route surveyed.

In July, 1882, Monongalia voted down, by a majority of 32, a proposition to take $150,000 of the capital stock of the Iron valley and Morgantown railroad. A later proposition to apportion part of the subscription to a narrow gauge road from Morgantown to Blacksville was also lost by a large vote. In the meantime, Grant and Cass districts, which had been influential in defeating the railway projects devised by others, proposed, December 27, 1882, a plan for a railroad of their own from the Pennsylvania line via Grantsville and up Davis run to the Marion county line—a plan which received only 114 votes at a special election called in the two districts.

Construction on the Iron valley and Morgantown road was begun at Morgantown March 22, 1883, but was discontinued a few days later. At a meeting held at Fairmont in the fall of 1884, the attempts of the directors of the West Virginia and Pennsylvania railroad, to get aid in the construction of that road, also failed.

At other points there were rumors of approaching railroads which

*In her efforts to secure railway connections, Morgantown was partly influenced by lack of adequate facilities for river navigation. Lock "Number 9," although its completion in 1879 was celebrated by 1,500 people gathered from surrounding points, proved ineffective until the completion of lock "Number 8" in 1889, after a delay of ten years during which steamers could not ascend the river above New Geneva.

**In 1882 the Kingwood railway company was organized to construct a narrow-gauge railway from Kingwood to Tunnelton. Kingwood especially felt the immediate need of railway connection. She had already endeavored to hold her position as the county seat by neighboring improvements. Additional development of resources in the vicinity necessarily awaited the coming of the railway. Promoters and prospectors were already active in preparation for new industries.

In 1882 the Preston company was incorporated to traffic in minerals and timber lands, to mine and manufacture minerals and to contract for the construction of railways, telegraph lines and bridges.

vanished before they arrived. In 1872, Charleston also expected a terminal railway from Parkersburg via Two Mile creek, Tupper's creek and Pocatalico. In 1873 the Shenandoah and Ohio was projected from the Shenandoah valley via Franklin. In 1873 the Washington and Ohio railway was projected through the heart of West Virginia via Winchester, Capon Springs, Moorefield, Petersburg, Buckhannon, Weston, Glenville, Sandyville and Point Pleasant. In 1895, the Chesapeake and Western was projected via the South Branch valley. Later paper lines were the Seaboard and Great Western of 1899 and the C. and I. in 1902.

CHESAPEAKE AND OHIO RAILROAD.

The first actual railway construction after the war was across the middle of the state from east to west along the general route of the old James river and Kanawha turnpike.

The Chesapeake and Ohio railway traversing one of the most picturesque regions of West Virginia is the successor of the Covington and Ohio railroad, which was organized as an extension of the Virginia Central (incorporated 1850) the successor of the Louisa railroad which obtained its charter in 1836. The Virginia Central received its charter under the influence of a state policy to link Chesapeake Bay and the Ohio river by a railway, and construction was prosecuted by state appropriations until 1861 when the line was in operation to Jackson's river (ten miles east of Covington). It was operated to Covington in 1867. Work on the Covington and Ohio, abandoned in 1861, was resumed in 1868 under charters of incorporation secured from the legislature of both Virginia and West Virginia in 1865, and under later acts of 1867 which conferred additional privileges. Commissioners, appointed by the two states to co-operate in enlisting the interest of capitalists and the early completion of the road, experienced great difficulty in securing the financial aid necessary to meet the heavy expense of construction. In August they finally contracted with the Virginia Central railway company which undertook the construction. Under this arrangement the name of the road was changed to the Chesapeake and Ohio. Its president, General William C. Wickham, succeeded in attracting the interest of Collis P. Huntington and his associates who in November, 1869, made a contract which insured the successful completion of the road.

On June 9, 1870, the new road acquired from Virginia the title to

the Blue Ridge railroad, which Virginia had constructed through the mountains.

The new road was aided by the state through an act of 1868 which authorized townships to hold special elections to determine whether they would purchase stock. It also received aid from the sale of public land. The policy of the state to aid the road created much opposition, to which railroad men actively replied.

In the *Greenbrier Independent* in 1872 appeared articles opposing the road on the ground that it carried whiskey, killed chickens and cows, scared the horses, and threw teamsters out of employment.

Construction westward to Huntington was pushed vigorously. From 1869 to 1873 engineering corps and contractors were busy in the Alleghenies, in the Greenbrier valley, along the canyon of New river and the bottom lands of the Kanawha, and across Teay's valley, until continuous rails completed the new link between East and West. The full story of the work done would tell of hardships and dangers bravely borne, and of the faith and patience of skill and intelligence.

The materials for construction were brought over land in wagons or down the Greenbrier river in bateaux. The labor used in construction was largely furnished by colored laborers from Virginia. The employees for several years were principally Virginians.

On January 29, 1873, the last spike was driven on the New river bridge at Hawk's Nest, and the special Richmond train of President Wickham proceeded westward to Charleston and to Huntington. At Charleston the event was celebrated by appropriate display of speeches, terminating in a great display of fireworks. At Huntington the union of opposing waters by bands of steel was celebrated by pouring into the Ohio a barrel of James river water brought from Richmond. The president, in his speech, emphasized four great advantages of the road: (1) shortness of route between the Ohio and Norfolk harbor; (2) its easy grade and reduced number of curves; (3) the mild climate along the route; (4) the short distance of its Huntington terminus from Cincinnati.

The service of the road for several years was very inefficient and the tonnage very light. Only local passenger trains, and only a few freight trains were operated. The first engines were fired with cordwood.

The earlier success of the road was restricted both by loose methods of management and the provincial prejudices of many people residing along the route—some of whom had originally worked on the

road. The company charged high freight rates for slow transportation; and at the same time, conductors, baggage men and other subordinate officials, in some instances managed to secure free transportation for country produce which they purchased for almost nothing and sold at good prices at Richmond and other eastern points. Various people, inscrutably and mysteriously peculiar or jealously prejudiced, objected to the collection of fares, or at least objected to paying their fares in money. Some seemed to regard the railroad as the visible representative of a magic fund of wealth upon which the people should draw as heavily as possible at every opportunity.

To maintain telegraphic connections at first was rendered difficult by the depredations of the natives who cut the wires and appropriated them for domestic purposes.

The later effect of the road may be traced in the increasing price of land, the rise of many new industries, and the changed character of the population. Speculators and promoters promptly arrived to survey the resources of the country and to prepare for the new era of greater activity in opening the wealth which had so long remained dormant. Many who came to work on the railroad, or in some resulting industry, later married or sent for families left behind, and bought a small farm along the route of the railroad, or contributed to the growth of new towns. The mingling of newcomers from many older communities was conducive to the formation of new ideas and the stimulation of a larger and more vigorous life.

On November 1, 1873, the Chesapeake and Ohio found itself unable to meet the interest on its mortgage bonds. On October 9, 1875, after strenuous efforts to effect a settlement with the creditors, the road passed into the hands of a receiver appointed by the United States circuit court. After sharp litigation, on January 21, 1879, it passed to another receiver, General Wickham, appointed by the state courts of Virginia and West Virginia, and by him on July 1, 1878, it was sold and conveyed to C. P. Huntington and others by a scheme of reorganization which simply allowed time for further development of the business of the road without any diminution of the bonded indebtedness.

In 1880 the road was extended to Newport News and westward from Huntington to the Big Sandy and across the bridge, thus connecting with the Elizabethtown, Lexington and Big Sandy railroad.

Unable to meet the heavy fixed charged provided in the plan of reorganization, on June 15, 1886, the road was leased to the Newport News and Mississippi Valley company with hope of greater returns.

After the annulment of this lease, and as a result of suits brought by Mr. Huntington to recover advances of money, the road again passed to the receivership of General Wickham; and, in September, 1888, it was reorganized, through the co-operation of the powerful house of Drexel, Morgan & Co., and placed under control of M. E. Ingalls, who was also president of the "Big Four" system. In 1889, under charge of H. E. Huntington, the line was finished to Cincinnati.

Under the new management, branch lines were pushed into the coal fields up the tributaries of the New river and the Kanawha, including a branch from Cabin creek to Kayford, one from Gauley to Greendale, one from Thurmond to Stewart and one from Roncevert to Winterburn. The Loup creek branch, begun in 1892, was completed to Macdonald by September, 1893. Later the Greenbrier branch was completed to Durbin* and a line was constructed up the Guyandotte to Logan.

To meet the demands for extension, and for increasing traffic, exacted high intelligence and forethought and much outlay of money. The entire road was relaid with heavier rails and furnished with the most modern equipment. From a single track line laid with light rail upon a road bed unfit for modern traffic, the road has grown into a double-tracked, well-equipped line, with grades and curves much reduced by changes in alignment.

To avoid expensive litigation resulting from accidents, which were quite frequent for fifteen years after the completion of the road, the company finally inaugurated the block system.

From a line battling for its corporate existence before 1890, it later became a legitimate competitor of the other great trans-Appalachian carriers. From 1890 to 1909, the mileage increased from 215 to 600, the number of locomotives from 237 to 672, the number of freight cars from 9707 to 35,700 of larger capacity, the number of

*Even before the construction of the Greenbrier branch of the Chesapeake and Ohio, Marlinton, with faith in her future growth, aspired to be the county seat. At a special election, held in December, 1891, to decide the question of relocation of the county seat, Marlinton won by a vote of 940 against 475 for Huntersville. In 1894, Huntersville, hoping to secure removal from Marlinton back to the old location, secured a new election at which she again lost. The construction of the railroad in 1898-99 emphasized the wisdom of the removal.

Under a law of 1899, the Piney branch of the Chesapeake and Ohio, starting from Prince station on New river, was surveyed (in 1898 and 1899) and partly constructed (fourteen miles) by 1900 [to Raleigh station, about three miles from Raleigh Court House]. Thence the survey followed Piney southwest and up Soak creek, thence across the Winding Gulf, a tributary of the Guyandotte, which it followed to its mouth, and then on the Guyandotte to Pineville. In the same year the survey was changed to Slab Fork of the Guyandotte. In August, 1902, at Jenny's Gap on the ridge between the waters of the New river and the Guyandotte this proposed extension came into conflict with the extension of the Deepwater railway, starting at Glen Jean (or Loup creek) and running across the divide to the waters of Guyandotte and thence across the mountains to the Bluestone river. The decision in the Raleigh circuit court in favor of the Chesapeake and Ohio was later reversed by the supreme court of appeals, and the extension was never completed.

passenger cars from 155 to 300, the total annual tonnage from 3,760,577 to 18,511,362, the annual coal shipment to seaboard from 682,551 tons to 4,800,000 tons, the total coal tonnage from 1,454,856 to 12,795,786 (including coke), and the total revenue from $7,161,949 to $26,630,717

Along the line, towns and cities vigorously sprang into existence. From a village of three houses, which owed its birth to the construction of the railroad, Ronceverte on the Greenbrier evolved into a good business town. Its growth was largely determined by its timber industries, its convenient access to a good agricultural region, and its location at the junction of the Greenbrier branch line. Hinton was built on land purchased by Mr. Huntington, who later transferred it to the Central Land company, which he organized and of which he was president. Its growth was influenced by its selection as the end of the Huntington division, and as the headquarters of the division since the construction of the road.

The development in Fayette county is reflected in the incorporation of the following towns: Fayetteville, 1883; Montgomery, 1890; Ansted, 1891; Mt. Hope, 1895; Powellton, 1897; Glen Jean, 1898, Scarbro, 1901; Thurmond, 1903; Oak Hill, 1903; Kilsyth, 1903; Macdonald, 1904 and Stuart, 1906.

Of these, Montgomery, a shipping center for twenty-six coal operations, is the largest town. Until 1890 the station was called Cannelton, which at the completion of the railroad was the name of the postoffice on the opposite side of the river. From 1876, the town was called Coal Valley Post Office, through the influence of the Coal Valley Coal company which began to operate a coal mine there, platted the town, and changed the name from Montgomery's Landing to Coal Valley. The number of stores in the town increased to four or five by 1880, but the rapid growth did not begin until about 1895. The later growth was influenced by the construction of the Kanawha and Michigan on the opposite side of the river, the erection of the new bridge across the river, and the connection of the Virginia railway with the Chesapeake and Ohio. Its future is assured by vast tracts of neighboring coal land still undeveloped, including a tract of 10,000 acres belonging to the C. P. Huntington estate.

The proposition to relocate the county seat at Montgomery was submitted to the voters in 1892 and rejected by a vote of 1894 against 2,257.

Ansted, two miles from the main line of the Chesapeake and Ohio, began its progressive history in 1873 with the organization of

the Gauley-Kanawha Coal company which acquired lands through the agency of Col. G. W. Imboden and completed a narrow-gauge railroad, later (1889) converted into a broad gauge.

Thurmond is located at the mouth of Dun Loup creek at the junction of the Loup creek branch of the Chesapeake and Ohio, where a mountain side was cut away to make a train yard for the hundreds of cars of coal that arrive daily from the mines along the branch. Through it in 1910 the road secured nearly one-fifth of its entire revenues and about 45% of the earnings of the Hinton division. It handled in that year 4,283,641 tons of freight producing a revenue of $4,824,911.49.

Mt. Hope, around which mines opened in rapid succession after the opening of the Loup creek branch, grew steadily until March, 1910, when it was largely destroyed by fire.

The growth of Glen Jean resulted largely from its location at the junction of the Chesapeake and Ohio, the Kanawha, Glen Jean and Eastern, and the White Oak railways.

In relation to the railroad, Charleston had the disadvantage of location across the unbridged Kanawha which, according to the *Wheeling Intelligencer* had "the poorest excuse of a ferry that was ever allowed to cross a stream." The *Intelligencer,* referring to the uncertainties of the ferry, predicted that the town, whose facilities for modern travel were restricted to a "John boat" controlled by a lazy oarsboy impervious to the appeals and signals of beckoning passengers, would become a mere "Switchville." In this forecast, the oracle of Wheeling was mistaken.

Charleston rapidly rose on field and swamp and soon became the state capital. In 1892, it secured improved facilities of access to the railway station by the erection of a toll-bridge under the auspices of a private corporation. Its later growth was assured by its location in the center of a region of unexploited wealth of timber and minerals, and by its selection as the permanent seat of the state government. Naturally, it became a center of banking, wholesale mercantile business, and industrial manufacturing plants. Its recent development was also influenced by improvements in river navigation, and by increased facilities of railway connection with the northwest, northeast and southeast.

At. St. Albans, the Chesapeake and Ohio railroad company, in 1871, erected a saw mill to cut lumber for the railway which was then under construction and which later attracted the mills and factories which created a prosperous "lumber town." Several great timber

COAL FLEET ON THE GREAT KANAWHA RIVER (Near Charleston).

View of River Front, Charleston.

companies located up Coal river, down which they rafted their products. St. Albans was retarded in growth by the policy of the Central Land company which, although it held lands at St. Albans, devoted all its attention to the development of Huntington. Later the preparation for a greater city was made by Grant Hall, who, after purchasing the lands of the Central Land company, graded the streets and laid cement walks. These foundations were soon followed by the inauguration of a system of lighting and water-works, and more recently by other municipal improvements including trolley car connections with Charleston.

In 1900 contracts were made for the construction of the Kanawha, Pocahontas and Coal river railway along Coal river. The charter, granted in 1896, provided for a route via the junction of Marsh and Clear forks, thence via Marsh fork to the Norforlk and Western in Mercer county. The road was constructed from St. Albans through Boone, and into Lincoln county, in 1905-07. It leads to rich coal fields and lumber regions.

Huntington was planned by C. P. Huntington, who, after an irritating experience at Guyandotte, was firmly convinced that his mission was to locate a new town. It was planned for orderly growth and development. It was also favored by its location at a natural gateway between different regions, its excellent shipping facilities, and its vicinity to a territory rich in timber and mineral wealth. Other factors in its later growth were the convenience of cheap fuel and the construction of the Camden Interstate Electric Line which connects with important neighboring towns. The life of the town has also been influenced by the state normal school.

BALTIMORE AND OHIO BRANCHES.

Although the earlier post-bellum activities to secure additional railroads in the Monongahela valley were most prominent in the lower counties, Monongalia and Preston, the first actual construction resulting in the opening of new lines of railway in this region was farther south along the valleys of West Fork, Buckhannon and Tygart's. The construction of a railroad from Clarksburg to Weston, authorized by act of 1866, which also gave the Baltimore and Ohio directors possession of the road from Grafton to Parkersburg, was the beginning of a system of short lines converging at Clarksburg and Grafton—often originally built by independent companies and sometimes constructed with narrow-guage which was later widened into standard gauge—furnishing connections to Buckhannon, Pickens, Sutton, Rich-

wood, Philippi and Belington, opening vast coal fields and timber regions, and penetrating some of the best farming sections.

The first movement resulting in this remarkable development apparently originated at Weston, the county seat of Lewis, which, already becoming a center of local trade before the war, was stimulated to a larger growth at its close, first by securing the location of the asylum for the insane, and later by securing transportation facilities which tapped its resources and encouraged industrial development.

In January, 1875, the citizens of Lewis, determined to secure an outlet to the world, incorporated the Weston and West Fork railroad to connect Weston with Clarksburg, and at Weston began the construction of a narrow gauge line. Three years later this uncompleted line was leased to the newly incorporated Clarksburg, Weston and Glenville transportation company.

Under the direction of the energetic J. N. Camden, who was elected president of the new road in 1878, the work begun at Weston was completed to Clarksburg in 1881, and steps were taken to develop the section along the route.

In April, 1882, a movement was begun to connect Weston with Buckhannon by the incorporation of the Buckhannon and West Fork railroad. This was soon leased to the newly formed Weston and Centreville railroad company, and the combination emerged as the Weston and Buckhannon railroad which was promptly constructed as a narrow gauge, partly by county levy, and opened for traffic in 1883 or 1884. Its superintendent was Dr. A. H. Kunst who in 1888 was elected president of the road, (and who was also president of the Clarksburg, Weston and Glenville road). In 1889, this line was changed to a standard gauge as a result of its increased earnings and increasing traffic, and especially to meet the plans of Senator Camden who had purchased large mineral rights on the east bank of the Monongahela for which he proposed to get an outlet to Pittsburg by constructing the Monongahela river railroad as a broad gauge from Clarksburg to Fairmont.

In April, 1889, the Weston and West Fork, and the Clarksburg, Weston and Glenville railroads were merged into the Clarksburg, Weston and Midland railroad which allowed the stockholders 5 per cent of the stock held in either of the other companies, and later in the year absorbed the Weston and Elk river railroad on the same terms. On July 20, 1889, following the last merger, the Buckhannon river railroad was incorporated to run to Pickens.

The Clarksburg, Weston and Midland, after absorbing the Buck-

hannon and West Fork and the Weston and Centreville in September, 1889, and the Buckhannon river railroad in February, 1890, was reorganized as the West Virginia and Pittsburg railroad which was changed to a standard gauge road with Senator Camden as president, and Dr. Kunst as vice president and general manager—and soon became a branch of the Baltimore and Ohio. This road extended from Clarksburg via Weston and Buckhannon to Pickens in Randolph.

A branch was extended from Weston to Sutton in Braxton county via Flatwoods (Lane's Bottom), from which a side branch was extended to Camden-on-Gauley, in Webster county, and later to Richwood. Each branch terminated in a region previously unopened, but quickly responsive to the touch of capital.*

In making the road a broad gauge Senator Camden seems to have contemplated a connecting link between the Pittsburg region and the south by extension of the line to the Chesapeake and Ohio at Covington, Virginia.

Weston received a wonderful forward impetus by the construction of the early narrow gauge system to Clarksburg, by the later extension and change to broad gauge, by securing the location of railway offices and repair shops, by the opening of mineral and timber resources, and by the establishment of large manufacturing industries.

From about 1875 to 1890 many poplar logs, obtained at a low price, were floated on the West Fork and its tributaries by R. T. Lowndes and others who manufactured them on circular-saw mills at Clarksburg. The larger part of the timber of virgin forests not removed by the river was cut by portable stave and circular-saw mills which found an opportunity for most active operations in the Collins settlement and other territory in the southern and southwestern parts of the county. In many instances the product was transported by wagon

*Sutton, settled by descendants of the original trans-Allegheny pioneers, received a new impetus from the advent of the railway branch which brought new blood and new industries. The chief resources of its growth were the large lumber plant erected by the Pardee-Curtin Lumber company and the advantages resulting from the facilities of shipment for a large surrounding region including all of Clay county.

Camden-on-Gauley is largely a child of the lumber industry which was developed in this region by the Gauley Lumber company under the management of J. N. Camden and C. K. Lord (a vice-president of the Baltimore and Ohio). The industry resulted from the purchase of an immense tract of timber-land (140,000 acres) in Webster, Pocahontas and Nicholas counties by Camden, who connected it with the West Virginia and Pittsburg railroad. The machinery for the first large lumber plant costing $140,000 was hauled from the Chesapeake and Ohio railroad, a distance of forty miles—so that the plant could be completed and ready for work coincident with the completion of the branch railway from Flatwoods. Within eighteen months the place became a thriving business town of considerable mercantile trade. Its later growth was influenced by its healthful and scenic surroundings.

Richwood, located in Nicholas coounty, at the end of a later extension of the branch railway from Camden-on-Gauley, became the foremost lumber town in the state. Its rapid growth was due to extensive saw-mills, a paperpulp mill, a tannery, a clothespin factory, a hub factory and other prosperous woodworking industries.

for twenty or twenty-five miles to reach railway shipping points. The timber of commercial value has now largely been cut and sold. Practically all the poplar and the greater part of the best oak has disappeared.

At the beginning of the new century, industrial development in the western end of Lewis county received a new impetus by the opening of the rich oil fields on Sandy Fork of the Kanawha, in a region once known as the Camden-Bailey-Camden lands and largely settled by humble Irish who, after a period of day-labor on the construction of the Baltimore and Ohio in West Virginia, decided to invest their small earnings in small farms.

From Weston, eastward over the narrow gauge (changed to a broad gauge by 1890), Buckhannon was first reached by passenger train in 1883. Later it was entered by the West Virginia and Pittsburg railway which in 1891 was extended by its new owners, the Baltimore and Ohio, up the Buckhannon into the unbroken forests to the site of Pickens at which was erected a large lumber manufacturing plant around which grew the town.

Surrounded by a fine agricultural region and favored by a good country trade, Buckhannon had already grown to be an important place even before the advent of the railroad which greatly increased its development. Better transportation facilities gave it new manufacturing plants and made it the home office of several industries, such as the Newlon Coal works, and the A. J. G. Griffith Lumber plants, which extended their influence through the counties of Upshur and Randolph and even into Webster and Nicholas.

The first steam saw-mill in Upshur was operated on Cutright's run. The commercial lumber industry, begun about 1883 as a result of the construction of the railroad to Buckhannon, increased with its later extension up the river. The Buckhannon Boom and Lumber company operated large mills at Buckhannon and Ten-Mile. Buckhannon received many logs from river floats, and both logs and lumber from Ten-Mile by tramroad. Other logs were brought by railroad after the extension of the West Virginia and Pittsburg line to Newlon in 1891. In 1893 about half of Upshur county was still covered with timber, which, however, was rapidly taken out thereafter.

Buckhannon soon showed the results of the new development. In 1887, it obtained the location of a woolen mill built by Parke brothers. In 1888, it had its first electric light plant. In 1889, it had a tannery; and, in 1902, it had a glass plant in operation. By 1894, the town contained a population of about 2700 with a strong tendency to-

ward further increase which later became stronger by the completion of new railroad lines, especially by the construction of the short line from Tygart's Valley Junction by the Baltimore and Ohio in 1904 in order to compete with the Coal and Coke.

Below Upshur, on Tygart's Valley river, Philippi, the county seat of Barbour also began to feel the spirit of new industrial life. Incorporated in 1871 by the legislature, by 1884 it became a terminal of the Grafton and Greenbrier railroad, a narrow gauge road which had projected plans for extension to Charleston, and which was widened to a standard guage a few years later and extended up Tygart's to Belington. With its completion began the steady progress of portable saw-mills from the line of track toward the heads of streams, producing increasing quantities of lumber which found shipping points at Moatsville, Belington, Philippi and Clements. At the beginning of this new industry much timber along the river was drifted to Grafton where it was manufactured into lumber at Curtin's band mill.

The development of Grafton, which had begun before the war, was considerably stimulated after the war by timber industries depending upon the surrounding region, and especially upon the supply of timber from Tygart's Valley river. By 1870 the manufacture of lumber on a large scale by a large circular-saw mill was begun east of Grafton at Westerman and a large water-power saw-mill was operated at Valley Falls. The latter at first received timber over wooden tramways and later from the river rafts floated from points as high as Philippi. Later a large band mill, constructed by Captain G. W. Curtin at Grafton, received its supply of logs chiefly from points on Tygart's above the boundaries of Taylor.

In 1872, Grafton seemed to have had aspirations to become the capital of the state. A convention of "delegates from six or eight counties, and citizens of Grafton," held at Grafton in the early part of the year, and presided over by ex-Governor Johnson, drafted a set of resolutions instructing the delegates of the counties at the constitutional convention at Charleston to submit to the people of the state the question of removing the capital from Charleston. Although the

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A short line of the Baltimore and Ohio has been planned to extend from the mouth of French creek to connect with the Richwood branch in the vicinity of Holly Junction, or Centralia, avoiding the heavy grades on the old route between Buckhannon and Weston. When completed it will greatly benefit Buckhannon and the people along the line. It is expected that it will haul all the heavy freight, from the region between Holly Junction to Richwood, which will be greatly increased by the development of mining lands of the Baltimore and Ohio in that region. By avoiding the heavy grade between Weston and Buckhannon, great expense will be saved. By the construction of the new branch, the freight from Richwood can reach Grafton by a gradually descending grade for almost the entire distance.

town failed to secure the capital, it was successful in the contest for the county seat in 1878.*

After the construction of the Grafton and Greenbrier branch to Philippi (later extended to Belington), Grafton received large quantities of dairy and farm products for shipment east.

The earliest projects of a railroad along the Monongahela to intersect the earlier Baltimore and Ohio lines between East and West, were revived under more favorable auspices and under more favorable conditions—including the completion of the line from Weston to Clarksburg. The construction of the road, by sections which were later combined into a single line, was a great stimulation to industrial and social development in each county through which it passed and also in parts of Preston.

Clarksburg, which had become the terminus of the line constructed from Weston, became the starting point of the Monongahela line to Fairmont; and later it was made the eastern terminal of the short line constructed to the Ohio at New Martinsville. The town, steadily growing under the earlier impetus which it had received from its location on the Parkersburg line of the Baltimore and Ohio, had also been favored by the traffic of the turnpike which served as a prominent thoroughfare from Fairmont up West Fork and to Sutton in Braxton county—and by the limestone soil and the earlier development of settlements which at the opening of the war had made Harrison probably the most improved of the inland counties of West Virginia. The county had total valuation of live stock exceeded only by Hampshire and Greenbrier counties, and a corn production exceeded only by Hampshire and Jackson counties. By the close of the war the town was the center of a good coal trade. It received large additional prosperity from the construction of lines later combining to form the West Virginia and Pittsburg railroad, which penetrated southward to the richest coal and timber lands in the heart of the state and northward through great coal fields to the metropolis at the head of the Ohio.

In 1888, seven years after the completion of the Western line to Clarksburg, the Monongahela River Railway company was organized to build a road from Clarksburg to Fairmont. It was incorporated by J. N. Camden and others, beginning with a capital of only $5,000 which

*In November, 1878, at a special election, Grafton was chosen as the county seat by a large majority of the popular vote. It promptly arranged to remove the archives and office equipments from Pruntytown to Brinkman's Opera House. The county court at its next meeting at Pruntytown authorized the use of the opera house as a court house, and adjourned to meet at Grafton in the afternoon. Into wagons which were ready the records and equipment were quickly carried under the direction of John W. Mason who on his bay horse proudly led the procession to Grafton, which enthusiastically celebrated her rising fortunes while Pruntytown mourned the beginning of her decline. Pruntytown was later conciliated by political negotiations which secured for her the location of the reform school for boys.

Courtesy of W. Va. Geological Survey

PLANT AND TOWN OF ENTERPRISE, HARRISON COUNTY.
(Consolidated Coal Company.

was later increased. Opened for traffic in 1889 and completed in 1891, it became the property of the Baltimore and Ohio in 1897. It opened rich coal fields, especially contributing to the success of the large plants of the Consolidated Coal Company which produces an enormous tonnage both of coal and coke. It also increased the importance of Clarksburg as a commercial and industrial center.

The short line connecting Clarksburg with New Martinsville was incorporated by H. H. Rogers, T. Moore Jackson and others who sold the franchise to the Baltimore and Ohio. Completed by 1902, it opened rich coal fields and timber regions which have contributed to the wealth of Clarksburg and the entire region.

Favored by geographic situation, rich resources, and increasing railroad facilities, the old town of Clarksburg found itself in a state of development exceeding all expectations and exciting larger dreams of future prosperity and greatness. Municipal improvement followed each prominent industrial advance. Illuminating gas was introduced in 1871. Natural gas for heat and light was piped from Doddridge county in 1891. An electric light plant was erected in 1887, and water works were established in 1888. Great changes followed the discovery of oil and gas—in the western end of the county in 1889—which also increased the growth of Salem. Better lighted and better paved streets and the construction of new business houses soon indicated the advent of new prosperity. A street car line was constructed in 1900. By 1903, the city was heated by gas from one of the largest wells in the world, and shortly thereafter its facilities as a business center were increased by the construction of the Waldo hotel which ranks as one of the best modern hotels in the state.

The Monongahela River Railroad connecting Clarksburg with Fairmont, completed in 1888 and opened for traffic in 1889, was an important link and a determining factor in the combined Monongahela system. It opened valuable mines in a rich mineral field, including those at Monongah, and gave an industrial stimulus which resulted in the rise of several towns. It supplied coal for both eastern and western markets—and also for local use in Upshur and Lewis. It gave a more direct route for passenger traffic from Clarksburg to Wheeling, and stimulated the construction of the line from Morgantown to Uniontown by which a continuous direct connection was secured with Pittsburg—in each case superseding the elbow routes via Parkersburg or Grafton.

Fairmont, like Clarksburg, felt the flow of a new life awakened by the construction of connecting lines of railway which opened new in-

dustries. Even in the earlier post-bellum period, it began to feel a larger prosperity resulting from the return of the soldiers and others to work on farms which in some cases had long been idle. Its revival of industrial development in a larger sense really began about 1870 by the purchase of large tracts of land by capitalists interested in the mineral resources of the county. Three mines, opened in quick succession by eastern companies, soon began to make large shipments of coal, and produced a development in population and wealth which was only retarded by the panic of 1873 and the high freight rates charged by the Baltimore and Ohio. An era of improvement began in 1876, after a fire which destroyed a large part of the principal business section of the town in spite of the efforts of the primitive voluntary "bucket brigade" (of men, women and children) which at that time and place had not been superseded by the modern fire-engine. With some additions to the insurance money which largely covered the losses, the owners of the destroyed buildings were able to replace them with better structures and to secure better street grades. With the new era of development came the demand for the extension of Monongahela slack-water improvement to Fairmont—which Captain Roberts (who made the government survey from Morgantown in 1875) regarded as the head of the navigation of the Ohio.

By 1881, enterprising citizens of the town actively participated in cooperative effort through county committees and public meetings, to test the sense of the people on the question of the construction of a railroad up the Monongahela through Monongalia, Marion, Harrison and Lewis counties. With the construction of sections of railway connecting the town with Morgantown in 1886 and with Clarksburg a few years later, enterprising citizens, seizing opportunity by the forelock organized the "Fairmont Development Company" which contributed greatly to the rapid growth of the town by offering inducements to new industrial plants which were seeking a location. The town was also favored by other advantages such as schools and hotels, and more recently it has been benefited by the construction of electric lines connecting it with Clarksburg and Mannington.

Fairmont has shared in the prosperity arising from the oil wells in the western part of the county which caused a rapid increase of population at Mannington after 1889.

Two years before the Camden line between Fairmont and Clarksburg was built, Morgantown secured connection with the Baltimore and Ohio at Fairmont by a line later extended to connect with the Baltimore and Ohio line via Connellsville and Pittsburg. Even as early

as the latter part of 1883, while the Pennsylvania interests were still endeavoring to secure the construction of a branch line into West Virginia along the Monongahela, the Fairmont, Morgantown and Pittsburg Railroad company was organized—apparently backed by the Baltimore and Ohio—to extend the Baltimore and Ohio line from Fairmont to Morgantown and also to connect with its line at Uniontown. Construction was delayed by contests with the West Virginia and Pennsylvania over the right of way—in 1884 at Fairmont, and later at Point Marion and along Cheat where there was room for only one road. The new line, operated by the Baltimore and Ohio, was opened to South Morgantown by January 30, 1886 and to Morgantown a few days later. Three years later, Morgantown secured satisfactory steamboat communication with Pittsburg by the completion of "Lock Number 8" after a delay of ten years. The first boats which arrived at the wharf in 1889 were greeted by an enthusiastic crowd which the captain entertained by a display of an electric searchlight, the first that many of those present had ever seen.

The extension of the railroad from Morgantown to Uniontown, on which grading began in the spring of 1892, was practically completed early in 1894; and, after some delay occasioned by the bridge across Cheat at Point Marion, was opened to traffic in the following summer—soon resulting in the opening of rich coal fields in Monongalia county. In 1895, the authorized capital of the road which under the incorporation of 1893 had been $1,000,000 was increased to $2,740,000. At first inadequate for the vast freights which it carried, in 1907 the road was improved by equipment with new 85 pound rails and by a double track over part of its route.

The completion of railway connections with Fairmont revived the projected railway up Decker's creek. Grading for this road was begun in the spring of 1887 under the direction of the West Virginia Railway Company which proposed to complete a line via Masontown, Reedsville and Hardman's Furnace to Independence on the Baltimore and Ohio eleven miles east of Grafton, but on the failure to dispose of its bonds, suddenly collapsed, producing much anger among its unpaid Italians laborers and resulting in considerable friction in the settlement of its affairs. In the early nineties, the right of way and other properties belonging to the bankrupt company were purchased by George C. Sturgiss at public auction.

Coincident with the collapse of the Decker's creek line, the Tunnelton, Kingwood and Fairchance narrow gauge, surveyed in 1882 and graded in 1883, was completed from Tunnelton to Kingwood (in 1887). Originally constructed largely for transportation of timber, it was changed into a broad guage by J. Ami Martin in 1896 in order to facilitate shipments of coal to the East. With this road is largely associated the growth of Tunnelton which until 1873 contained less than a dozen families. A new era of industrial development for the town began with the advent of the Merchant's Coal company in 1895.

About 1891 the old expectation of the construction of a road on the west side of the river in Monongalia was temporarily revived. Stephen B. Elkins who visited Morgantown in 1890-91 to secure options on large tracts of coal lands on the west side of the Monongahela contemplated for awhile the purchase of the old West Virginia and Pennsylvania rights by the Davis-Elkins interests but negotiations failed largely on account of the prices demanded by the promoters.

The previous projects of a railway up Decker's creek were revived by Hon. George C. Sturgiss in 1898. The Morgantown and Kingwood railroad was chartered in January, 1899, with a capital stock of $200,000. The new company opened an office at Morgantown and construction was begun on July 5, 1899, under the superintendence of J. Ami Martin. By November, 1900, the road was completed to

the Preston county line over eleven miles from Morgantown. From this point, after waiting in vain for expected local aid, the road was completed to Masontown in 1902. At this time there were several projects for extensions westward.

In 1902 the road passed to the control of Senator Stephen B. Elkins and his sons who also purchased the property of the Cheat River and Pittsburg railroad and determined upon eastward extension to connect with the Baltimore and Ohio at Rowlesburg and with the Cheat Valley railroad. The line was completed to Kingwood in 1906 and to Rowlesburg in 1907.

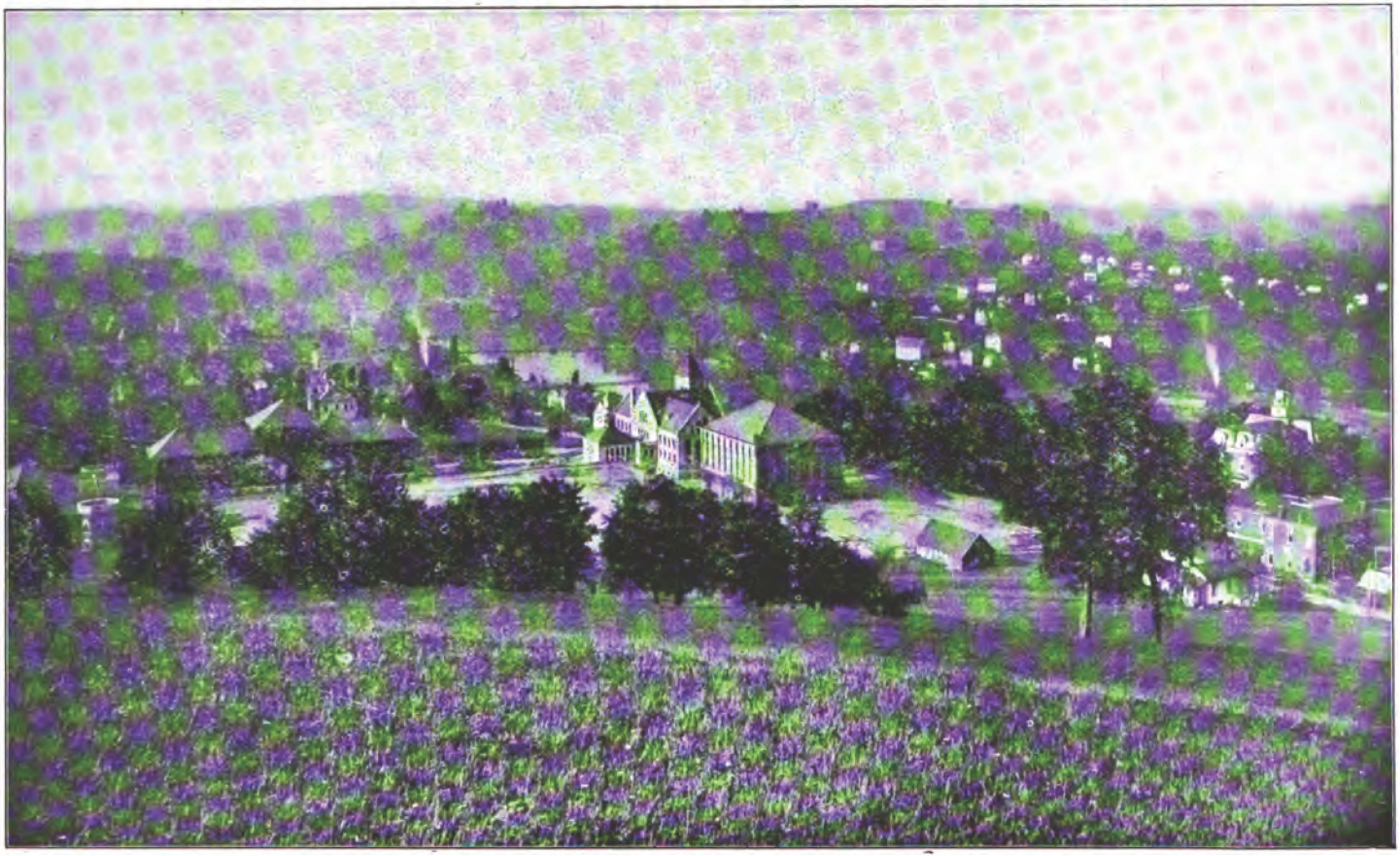
This short line road has proven a very valuable factor in the industrial development of the region through which it passes, opening up valuable coal and timber lands and carrying heavily laden trains of lumber, coal and coke for shipment via the B. & O. at Morgantown and Rowlesburg. The Decker's creek valley became a bee-hive of modern industry with daily shipments of products equal in value to the entire products of the valley for years previous to the construction of the road. At Sabraton, near Morgantown, is located a large plant of the American Sheet and Tin Plate company. The chief coal companies in operation along the line are the Connellsville Basin Coal and Coke company and the Elkins Coal company both of which make large daily shipments.

Coincident with the railroad development, solving problems of transportation on which depended the larger usefulness of the vast resources so long stored away in her neighboring hills, Morgantown expanded beyond her ancient boundaries. In the decade after 1900, besides smaller establishments of various kinds, seven new glass manufacturing plants were added to the single Seneca glass factory of the preceding decade. With new industrial development came many other changes—changes in population, property, prices, public problems and prosperity. At the opening of the second decade of the new century, the bright prospects resulting from the continued growth of established business and population were increased by the extension of electric lines beyond the immediate vicinity of the town and the construction of the "Buckhannon and Northern" railroad on the west side of the river, completed in 1912 between Fairmont and the Pennsylvania line, and ballasted in 1913.

In the eastern panhandle, in addition to the Shenandoah branch, the Baltimore and Ohio railway has a branch chartered in 1871 and opened in 1884 from Green Spring to Romney. An extension line, the Hampshire-Southern railroad, was organized in 1906, begun in 1909, and opened from Romney to Moorefield in April 1910, and to Petersburg in the following October. It furnishes facilities for shipment of large quantities of export cattle, hardwood timber, and limestone. It has also given a vigorous impetus to the business of fruit growing along the South Branch.

RAILWAYS ALONG THE OHIO.

In the upper panhandle, and southward along the Ohio, the touch of new industrial enterprise has set its mark at many points. Among the chief new industrial factors which contributed to the development were the production of oil and gas, and the establishment of glass and steel manufactures. Farther south, the timber industries were more



View of West Virginia University and Morgantown.

DOWN THE MONONGAHELA FROM MORGANTOWN.

important. The extension of railroad lines was also a determining feature.

To connect Wellsburg with Wheeling, the Panhandle railway company was incorporated in 1868, at the iniative of Wellsburg, to construct a line from Holliday's Cove via Wellsburg to Wheeling. By act of 1871 the road was designated as the Pittsburg, Wheeling and Kentucky ("Pe-wi-ky") railroad, but it was never built southward from Wheeling. The original company began grading in 1870. The new company, aided by a subsidy voted by Ohio county in 1872, completed the grading and bridging by 1874; but was compelled by the hard times to abandon further work. In 1876, the Pittsburg, Columbus and St. Louis, securing a ninety-nine year lease on the property and franchise, laid the rails, and ran the first trains. By 1890, the line was extended from Steubenville Junction in Hancock county to New Cumberland.*

In September 1890, the completion and opening of the terminal bridge from north Wheeling across the Ohio above Martin's Ferry—an important achievement which marked the end of forty years of striving—gave Wheeling a direct outlet to the West without depending upon the Bellaire bridge or the Steubenville bridge. The Wheeling Bridge and Terminal company was organized in 1882 as the Wheeling and Harrisburg railway company. In 1888 it received a subsidy of $300,000 and began construction. In the same year the Wheeling and Lake Erie railway company, organized in 1886, was also voted a subsidy of $300,000 by Wheeling, and by 1889 it built its road from Bowerston to the Ohio at Portland station from whence it entered Wheeling by the Terminal Bridge line. By 1890 it was completed to Toledo, and over it the first train ran on August 2, 1891. The Terminal Bridge railway was purchased by the Pennsylvania system at a forced sale in 1905.

Between Bellaire and Martin's Ferry, four great bridges now span the Ohio. The great "steel bridge," at Eleventh Street, begun in 1891 under a city franchise of 1890, rests on great piers of masonry at an

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*The people of New Cumberland even before the arrival of the railway believed their town was the most convenient location for the court house and offered to donate the grounds and brick to erect a building. At a special election held October, 1884, to determine the question of the relocation of the court house, New Cumberland was selected as the county seat by a vote of 747 against 401. In vain did the people of Fairview employ lawyers to resist the relocation by application to the supreme court for an injunction to prevent the removal of the records.

The removal to temporary quarters was accomplished on December 24. A permanent building was promptly constructed, and a special night expedition secured for it the bell of the old court house at Fairview (now Pughtown). In 1905, Chester, the residence of the sheriff, aspired to be the county seat; but, at a special election held April 25, was only able to secure 917 votes against 926 for New Cumberland. Several Fairview leaders urged the removal to Chester. Recently there have been suggestions of the possibility of later removal to Wierton, at which a large steel plant was established in 1911.

elevation safely above any of the tall chimneys which decorated the Pittsburg boats of the fifties.

At Wheeling, street cars were introduced in 1866, and by 1880 connected the extremities of the city and furnished a means of communication with all towns lying within a radius of five miles from its center.

Until about 1880, when a labor strike contributed to the decline of the industry, the city was a great nail manufacturing center. Later its interests were diverted to iron and steel manufactures. In the last quarter century it has undergone great changes resulting from the combinations of mills and the strengthening and expansion of industry in the whole Wheeling district—including establishments at Martin's Ferry and Steubenville, in which Wheeling capital dominates, and in Bellaire which may be regarded as tributary to Wheeling.* Besides the works owned by the United States Steel Corporation, there are several large independent companies. In the various manufacturing establishments of Wheeling proper (176 by the census of 1910), are employed about one-fourth of the entire population of the city.

In trade and business relations, the city by excellent electric transportation facilities links to itself the population of Benwood, McMechen, Glendale, Moundsville, Elm Grove, Wellsburg and Follansbee. Already a movement toward prospective unification of several communities under one government has begun to take form.**

Favored with great natural shipping facilities, the city is a great commercial and jobbing center. Its increasing future advantages are indicated by the prospective canalization of the Ohio and the opening of canal traffic with Lake Erie.

Within the last five years, Wheeling has been much benefitted by the construction of freight and passenger terminals and the elimination of grade crossings in the city.

The New York Central, through the Lake Erie, Alliance and Wheeling which was constructed to Dillonville, Ohio by 1911, has recently striven to enter the city.

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*In 1887, about 30 per cent of Wheeling's manufactured goods was conveyed to market via the Ohio (12 per cent up-river and 18 per cent down-river), and 70 per cent by rail (25 per cent over the Baltimore and Ohio to eastern cities and 30 or 35 per cent to western markets and the remainder over the Pittsburg, Wheeling and Kentucky and the Cleveland, Lorain and Wheeling railways). Imports arrived by the same routes in about the same proportion.

**Wheeling is governed under a modern charter which vests great powers in a board of control, consisting of a mayor and two elective members with a council composed of ward representatives. The municipality owns several public utilities—including water-works, a gas plant, an electric light plant and incinerator. It has a lower tax rate than any other city of its size in the country. The first attempt at municipal regulation of milk supply was made in 1906, and was followed by more effective legislation under a new charter in 1907. The Wheeling Milk Commission was organized in 1909 and began the certification of milk in 1910. The sewage system of the city is still antiquated and inadequate, and the method of sewage disposal is open to grave criticism.

Birdseye View of Wheeling, 1913.

Courtesy of W. Va. Geological Survey.

B. & O. Railroad Bridge over the Kanawha (Point Pleasant).

A factor of no small importance in the industrial growth of Wheeling, and other cities southward along the Ohio, was the Ohio River railroad which supplemented the declining commerce of the river and furnished a more rapid means of transportation. This road, a connecting link between the great Pennsylvania system and the Chesapeake and Ohio, was first chartered in 1881 as the Wheeling, Parkersburg and Charleston railroad; but was chartered in its later name in 1882. The road was opened for traffic from Wheeling to Parkersburg on June 15, 1884, from Parkersburg to Point Pleasant an January 1, 1886, from Point Pleasant to Huntington on April 1, 1888, and from Huntington to the Big Sandy in 1893. A branch was constructed from Millwood to Ripley in Jackson county in 1888, and another from Ravenswood to Spencer in Roane county in 1892.* A connecting branch from New Martinsville to Clarksburg was completed in 1902, and another from New Martinsville with a view to connection with Salem was completed to Middlebourne in 1913. An electric line was completed from Sistersville to Middlebourne in 1913.

Moundsville, at the junction of the new road with the Baltimore and Ohio, received a new stimulus to growth. New Martinsville felt the beginning of a new life which was further stimulated by manufacturing plants and the oil industry. Sistersville and St. Mary's received their largest stimulus from the oil industry. Sistersville grew rapidly after the oil discoveries on Polecat run in 1892. Williamstown later felt the influence of closer relations with Marietta by bridge connection across the river.

Parkersburg, which owed much of its prosperity to the Baltimore and Ohio railroad and the magnificent bridge by which it was connected with the Cincinnati railway, also received a new impetus by the railway connection north and south. In 1887 it had three petroleum refineries, with an annual product of 300,000 barrels which was shipped largely by rail (only 20% by down-river navigation). From Elizabeth and other points it received large quantities of grain. It still received some flat-boat traffic of other native products from the Little Kanawha, and especially rafts of logs of hardwood for the Parkersburg mills. Its interests were benefitted by the passage of the interstate commerce act in 1887. Its river trade was threatened with reduction by the construction of the railway from Zanesville to the

*About the same time (1890) a narrow gauge railroad from the Parkersburg branch of the B. and O. at Cairo in Ritchie county, a successor of the earlier "Calico Railroad" (of wooden rails) built to the Ritchie mines in 1877, was extended from Rutherford to Melin and then to McFarlan.

mouth of the Muskingum, but its railway facilities gave it a compensating increase for any reduction in other directions.*

Between Parkersburg and Huntington, several towns obtained new advantages for growth. Point Pleasant especially received a new stimulus to growth which was reinforced by the completion of the Kanawha and Michigan along the Great Kanawha to Charleston in 1884, and later by the construction of a railway bridge over the Ohio in 1885 and another over the Kanawha in 1887.

The decline of river traffic at various points, coincident with the extension of railway competition, was not indicative of commercial decay at such places.

WESTERN MARYLAND AND COAL AND COKE RAILWAYS.

Another important line of railway, constructed up the North Branch of the Potomac from Piedmont and later supplemented by a line up the Elk from Charleston, pierced a region centering at Elkins in Randolph and on the upper Cheat above Parsons in Tucker.

Perhaps the most remarkable industrial changes which have been made in any of the counties of the northern part of the State since the war have appeared in Tucker and Randolph, especially since the first penetration of the railroad into the Upper Cheat and Tygart's Valley country in 1885. In these counties, in 1870, there was a waste of valuable timber which indicated the economic wisdom of the speedy construction of an outlet to the nearest navigable point on Cheat or at Tucker Court House twenty-five miles above Rowlesburg station of the Baltimore and Ohio. In 1870, Diss Debar, the state commissioner of Immigration, who issued a handbook to exhibit the various resources of the state, proposed a fifty-five mile double track tramway from the Staunton turnpike to Tucker Court House, or St. George, via the Laurel Fork of Cheat—an enterprise which he said would promote the development of a rich timber region large enough to form a separate county. About the same time (1869) the Randolph, Tucker and Preston Turnpike was projected with a proposed termination at West Union or Chisholm's Mills.

Randolph, although settled a century earlier, remained so inaccessible that few people had settled in its borders. The families of the earliest settlers in many instances still occupied the property of their pioneer ancestors. Although Tygart's Valley region was fairly well settled and prosperous, other regions were in a wild and unsettled condition—resulting from the difficulty of making mountain roads and the distance from railroad connection. The streams as a rule were not navigable for boats and were too swift for any use except to float timber. From 1865 to 1895 many logs were floated on Cheat to Rowlesburg and Point Marion, and on Tygart's to Grafton (largely to the Purdee and Curtin Lumber Company). From 1888 to 1896, much spruce timber was floated from Shaver's Fork (almost at the head of Cheat) to Point Marion. The steam saw mill industry began in 1878 with the appearance of a portable mill brought from

*The Little Kanawha railway, chartered in 1896 to connect Parkersburg and Burnsville, was begun in 1897 and opened to Palestine above Elizabeth in 1898. It is now operated by the B. and O. railway company. Along the survey of the Wabash system, considerable grading was done between Palestine and Grantsville and as far up as Glenville but construction suddenly ceased in 1903, for financial reasons. Later there were rumors of a prospective line from Parkersburg to Charleston via Elizabeth, Spencer, Walton, down Two Mile and up the Great Kanawha.

Virginia to Dry Fork. The more active industry followed the arrival of railroads which made accessible the great coniferous and hardwood forests and, after 1894, encouraged the increase of the lumber business by the use of many huge band mills supplemented by the smaller portable saw mills.

Canaan Valley in Tucker and the surrounding plateau country remained practically undisturbed until the fire of 1863 destroyed the spruce on a large area, and some parts were undisturbed until the storm of 1877 swept a path through the spruce belt. The lumber industry, which had begun by the erection of a saw mill on Cheat as early as 1830, was stimulated by the gradual introduction of steam mills after the close of the civil war, especially after the completion of the railroad through the timber to Davis and westward to Parsons.

For over a decade after the close of the civil war period, although the settlement of the tillable parts of the county developed more rapidly than in the period before the war, Randolph was neglected while the tide of investment and immigration passed by to the far west. By 1880, however, it began to receive new accessions by immigration In 1879 the main body of a thrifty Swiss colony artfully decoyed into the wilderness of woe by land agents, crossed Shaver's Mountain to Alpina. Food was high, for Webster was then the nearest railroad point and difficult to reach by wagon. Instead of burning spruce-pine logs as the earliest settlers had done, they sawed them into lengths suitable for lumber in hope of placing them on the market—only to find that there was no accesible market.

The construction of a railroad from Piedmont up the North Branch to tap the undeveloped resources of Randolph county was proposed long before it was accomplished. The Potomac and Piedmont Coal and Railroad Company, incorporated by the legislature in 1866 and begun in 1880, secured a new charter in 1881 in its new name, the West Virginia Central and Pittsburg Railroad Company, which was organized with H. G. Davis as President. Passing over the divide beyond the headwaters of the Potomac, the new road continued south of the Great Backbone Mountains to Davis in the heart of the hard wood forests by November 1884. Early in 1889 the main line of the road, following the waters of the wild and picturesque Blackwater Run, was completed down the Dry Fork through the mountain gap to Parsons on the main branch of the Cheat; and, later in the year, after turning up Shaver's Fork for a short distance, it crossed to Leading Creek and reached picturesque Elkins (previously known as Leadsville) which was established as a town with terminal facilities, and has had a steady growth partly due to the proximity of the exhaustless Roaring Creek coal fields. From Elkins (by gradual extensions) one branch followed up the Valley River (sending off a smaller branch at Roaring creek five miles west of Elkins) and another returned eastward to Shaver's Fork which it ascended until finding a way through Shaver's Mountains, crossed to Glady Fork, ascended it to the divide and descended the West Fork of the Greenbrier to Durbin in Pocahontas. Another line was contemplated from Belington to Clarksburg to connect with the West Virginia and Pennsylvania Railroad that had been surveyed

from Clarksburg to Brownsville, but was abandoned. By 1891, trains were running on extensions to Beverly, and to Belington, where connection was made with a Tygart's Valley branch of the Baltimore and Ohio from Grafton. By 1904 connections were made at Durbin.

The new road, after passing through Mineral and grant, penetrated the vast coal fields of Tucker and Randolph. It carried into the silence of the primeval woods the hum of modern industry, and expressed its material usefulness in gigantic lumber plants and rich coal mines, and in newly made and growing towns—living monuments to men such as Windom, Blaine, Gorman, Bayard, Wilson, Fairfax, Davis, Douglas, Hendricks and Elkins. The opening of mineral and timber resources created towns such as Bayard, Thomas, Davis, Douglas, Hendricks, Bretz and Parsons in Tucker; such as Montrose and Elkins in Randolph; and such as Belington in Barbour.

Bayard received its earliest stimulus from the large Buffalo Lumber company and the Middlesex Leather company. Another factor in its growth was the North Branch Coal and Coke company whose principal office was located there. At Thomas were located the large Davis-Elkins Coal and Coke works. Six miles eastward on the branch from Thomas, the coal works and manufacturing industries together with a tannery and lumber plants soon supported a population of 1500 forming the town of Davis, with quite a mercantile trade ininreased by that of the surrounding country. Elkins, located in a lovely valley, bordering the northwestern bank of Tygart's Valley river, received its first stimulus to growth from the construction of engine and car shops by the railway company and the erection of homes for many operatives of the road. The resulting activity attracted a good class of merchants who increasingly attracted trade from the surrounding country.

The completion of the railroad through the timber to Davis and beyond furnished an outlet for the timber in the eastern and central sections and admitting portable and stationary saw mills which have since continued to operate. The later construction of the Dry Fork Railroad and its branch to Laneville opened a new field of operations. Everywhere, temporary railroads were forced into the heart of the woods followed by saw mills, tanneries, pulp mills, and lumber camps, to aid in the campaign of conquest and destruction of the previously unmolested forests—leaving behind the desolating tracks and unsightly debris of their triumphant march.

In 1905, along much of the old Fishinghawk pack-trail of early days

Courtesy of W. Va. Geological Survey.

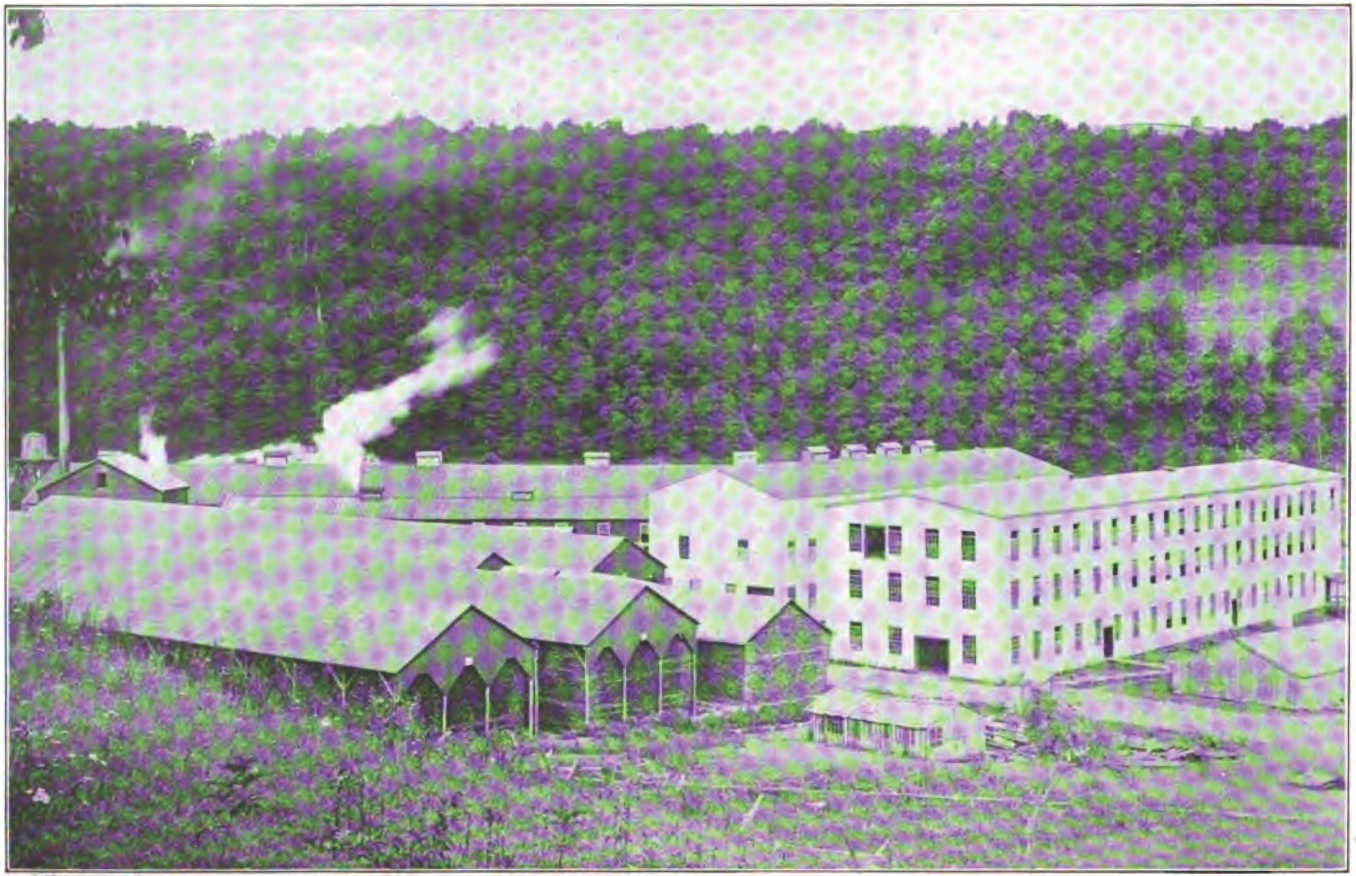
WATERFALL ALONG THE WESTERN MARYLAND RAILROAD (near Douglas).

Courtesy of W. Va. Geological Survey.

FALLS OF THE BLACKWATER.

Courtesy of W. Va. Geological Survey.

Pulp Mill at Davis (Tucker County).



Courtesy of W. Va. Geological Survey.

TANNERY AT GORMANIA.

from Beverly via Files creek and Fishinghawk to the Sinks of Gandy, the axe of the lumberman just beginning to break the primeval solitude, and steam whistles were heard both on west and east sounding the death knell of West Virginia's greatest primeval forest. On the forty-three miles of the Coal and Iron railway between Elkins and Durbin there were forty-nine saw mills. The wilderness had been cut in two by the railroad, and again further east by the Dry Fork, and again by log roads, one of which was twenty miles long. At the same time lumbermen were advancing from the waters of Greenbrier to attack the mighty forests from that side.

With the rapid disappearance of the timber, there emerge the problems of conservation and replanting. The West Virginia Pulp and Paper Company is already making extensive plantations of spruce on its cut-over lands near the head of Shaver's Fork of Cheat.

The industrial changes following the railroad resulted in demands for relocation of the court houses in three counties.

The first contest resulted from a demand for the removal of the county seat from old St. George to the more convenient location at Parsons. At a special election regularly held on April 28, 1893 to determine the question, the vote stood in favor of removal but was thrown out on a technicality. At another special election held July 15, 1893, the returns were again in favor of removal. Thereupon William E. Cayton, county clerk, and Nige Parsons, a lawyer, both of St. George secured an injunction against the action of the county court, but before the penal bond could be secured the court ordered the records, safes and everything pertaining to the court house in St. George removed to Parsons, August 7. To prevent the inconveniences of a long suit in the courts and to circumvent further technical proceedings from the officers and lawyers at St. George, the leaders along the railroad decided upon a course of successful action. A contract for the removal was given by the court to James Poling of Parsons, for a very meager sum but every person who had wagons and teams in the immediate vicinity joined the movement and assisted Mr. Poling without pay. The work was undertaken under the leadership of Mr. Ward Parsons and his deputies with about seven hundred men, twenty-five wagons and teams, and a number of saddle horses. The party rendezvoused in Parsons, immediately after the arrival of the 7.00 p. m. Cumberland train, which brought in about four hundred men from Canaan Valley, Davis and Fairfax district. The roads leading to St. George were carefully patrolled. The work was accomplished that night without any resistance by the St. George people although they had made great preparations to prevent the removal and set off some dynamite as a signal for the collection of their forces. The opposition, disheartened by reports of their pickets, did not appear in force on the scene of action. Everything was removed from the court house with as little damage as possible. If there had been resistance the affair might have had serious consequences. It was suspected that men on both sides were prepared for battle. After the removal of everything to the Wamsley farm, about three miles south of St. George on their way to Parsons, the party camped while some of the men went to Parsons to secure rations prepared by the anxious wives and daughters and weak-kneed men who had remained in town waiting the hazardous return of the expedition. The following day (August 8) the work was completed. The heavy safes and records were placed in the new temporary court house in Parsons. In vain did the St. George people renew the contest in the circuit court on the ground that the county court had broken the injunction. Judge Hoke sustained the county court. When the circuit court con-

vened at Parsons after the removal, the county officers who resided at St. George were very reluctant to attend. Thereupon, A. M. Cunningham, prosecuting attorney of Tucker county, who lived in Parsons, served notice on William E. Cupp, sheriff, William E. Cayton, county clerk and C. W. Minear, circuit clerk, to attend court and take up their duties as officers in the new county seat, or their offices would be declared vacant, and would be filled according to law. Every officer obeyed the notice, and later purchased property and located at the new county seat.

Elkins became the county seat of Randolph county after a spirited contest, or rather a series of contests, against Beverly at which a new court house was begun in 1892 and completed in 1894. The town, on August 30, 1897, made a proposition to furnish a court house and jail and requested an election to determine the question of removal. The county court at first ordered an election for October 5, but later delayed action (September 6) and finally declined to take action. In the elesction of Octobtr, Beverly won. The contest was renewed when the county court, on April 29, 1898, accepted a bid for the construction of a new court house at Beverly on the site of the old building which had been burned. Strong interests at Elkins began injunction proceedings to prevent the construction. In November 1898, the question of removal was again submitted to the people, Elkins again agreeing to furnish grounds. Elkins, which received three-fifths of the vote cast on the question, but not three-fifths of the total vote, demanded a recount which the county court refused to grant. On February 4, 1899, she obtained a mandmus from the supreme court of appeals ordering a re-canvass of the vote. On March 28, the county court made a re-count, recording only the total number of ballots returned by districts. It entered objections to the returns form Roaring creek district on the ground that the election officers had not been sworn. On March 29, the total vote was announced: 2145 in favor of relocation, 1320 against, and 312 blank. The court finally decided that the 312 blank ballots should be counted as part of the total number of votes cast, making a total of 3777—of which less than three-fifths had voted for removal. Elkins again appealed to the supreme court of appeals, which reversed the decision of the commissioners.* The county court then released citzens of Elkins from

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*While awaiting judgment of the supreme court there were frequent rumors of impending hostilities between the two towns, only six miles apart. The tension reached a high pitch. Elkins people avoided visits to Beverly and Beverly people avoided intercourse with Elkins. For awhile, few ventured to travel on the turnpike between the towns after dark unless armed. Rumors that the Elkins citizens were arming preparatory to a march to Beverly to storm the court house and capture the records caused intense excitement through the county, and attracted rural sympathizers to each town to aid the townsmen in a prospective fight.

At Elkins military organization and drills were frequent at evening after the men had quit their work in the shops and factories. The Elkins forces were encouraged and directed principally by John T. Davis, James Fosten, W. G. Wilson (sometime speaker of the House of Delegates), Jesse Goddin and other leading citizens.

Meanwhile, the supporters of Beverly were not idle. Apprehensive of imminent danger of attack, the citizens of Beverly banded together under the leadership of Major J. French Harding of Confederate fame; Lieutenant William H. Wilson, the present county clerk, F. A. Rowan and others who had experienced active military service. They threw up around the court house a line of intrenchments, designed to protect the clerks' office. Armed squads stood guard over the vaults containing the records. Over a hundred armed men were drilled by Major Harding and ready to occupy the intrenchment at the first signal of danger. Among these men were many mountaineers, expert shooters, armed with Winchester rifles. The townsmen were chiefly armed with shot guns loaded with buck shot. Beverly had an advantage through the support of the county officials whose influence was almost solidly in favor of the old county seat, from which it was popularly believed the records could never be taken. She also had another advantage over Elkins which although she had twice as many men in arms felt her disadvantage as the attacking party. Determined to resist an attempt at attack, she placed pickets at a distance of one-half mile, one and one-half miles and two miles down the pike and along the right of way of the railroad.

The crisis was reached one night when Squire John DeWitt, an Elkins shoemaker and a famous county character, whose sympathy for Beverly could not be suppressed even by a shower of rotten eggs, rode into Beverly out of breath, and excitedly and dramatically announced that the "Hessians" were coming. At the same time all communication by telephone or telegraph between the two towns was cut off by Elkins sympathizers. Within a half hour after DeWitt's arrival one

their proposition to furnish a site for buildings, and by order of July 5, 1900 proceeded to purchase grounds at Elkins on which the new court house was soon erected.

The rapid growth of Belington and the ambitions of its property owners, together with the local sectional feeling in the two ends of Barbour county, in 1903 produced a county seat contest in which the adherents of Philippi and of Belington spent considerable effort and money. After a strenuous campaign, in which Belington especially opposed the methods of the "court house ring" at Philippi, the people by their votes at a special election decided against removal of the county seat.

Very recently the industrial activity and prospective future of the regions along the upper Monongahela, and along the Elk, have received new promise of importance by the construction of an important outlet. The Coal and Coke railway was incorporated and begun in 1902, and completed in 1906 under management of Senator Henry G. Davis and Senator Stephen B. Elkins, in cooperation with the Wabash interests. Its authorized capital was $10,000,000. Conceived as a means in the development of vast coal and timber properties, it fortunately became a connecting link between great trunk lines—especially by the acquisition of the Elk River division of the old Charleston, Clendennin and Sutton railway (begun at Charleston, 1893) with its old established and valuable Charleston terminals adjacent to those of the Kanawha and Michigan, with which track connection was former. Favored by its geographical location, the road has good connections with both eastern and western markets for coal and coke produced along its line. At the south, it reaches the middle and western states by the Kanawha and Michigan and the Chesapeake and Ohio lines. At the north it has connections with the lakes and the eastern seaboard by the Wabash (Western Maryland) and Baltimore and Ohio systems. The company owns carefully selected coal lands and coal rights along the route of the road in four counties drained by the Monongahela—Randolph, Barbour, Upshur and Lewis—and also in Gilmer and Braxton. The Pittsburg vein in this region is regarded as

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hundred and fifty Beverly patriots armed to the teeth were prepared to defend the site of their ancient seat of local government, and advanced to the breast works at the foot of Mt. Iser where but thirty years before Imboden's cohorts had been intrenched. At Elkins a special train stood at the railway station awaiting the order to carry to Beverly five hundred armed Elkin supporters who thronged the streets. Plans were completed to leave at 9 p. m.

Older heads discouraged the expedition and probably prevented serious conflict. At a quarter of nine the band began to play on the corner in front of the Elkins National Bank and attracted the awaiting crowd. The late attorney C. Wood Dailey (a brother of Judge Dailey of Moorefield), the chief counsel of the West Virginia Central, now the Western Maryland, mounted the bank steps, obtained the attention of the throng, and began a most remarkable speech, pleading for law and order, and urging his hearers to await the verdict of the supreme court before prosecuting their rash action. He spoke of the certainty of bloodshed; and as he continued his speech, which was over an hour in length, his eloquence reached a high pitch which served to dampen the arder of the crowd before him. When he closed, the crowd disbanded quietly, and hot headed leaders sought a retreat. Orders were given that the special train was not wanted.

A few days later, the decision of the court was announced and the removal of the records was accomplished quietly and legally.

a better coal than its type in the Fairmont and Clarksburg districts—being harder and yielding a greater per cent of large blocks.

Along the entire line of the road many villages and towns are beginning to emerge. The chief towns along the Elk are Gassaway in Braxton, Clay in Clay, and Clendennin in Kanawha. A branch line extends from Gassaway to Sutton, and a timber road extends from Clay up Buffalo. Clendennin has received a new stimulus from oil operations.

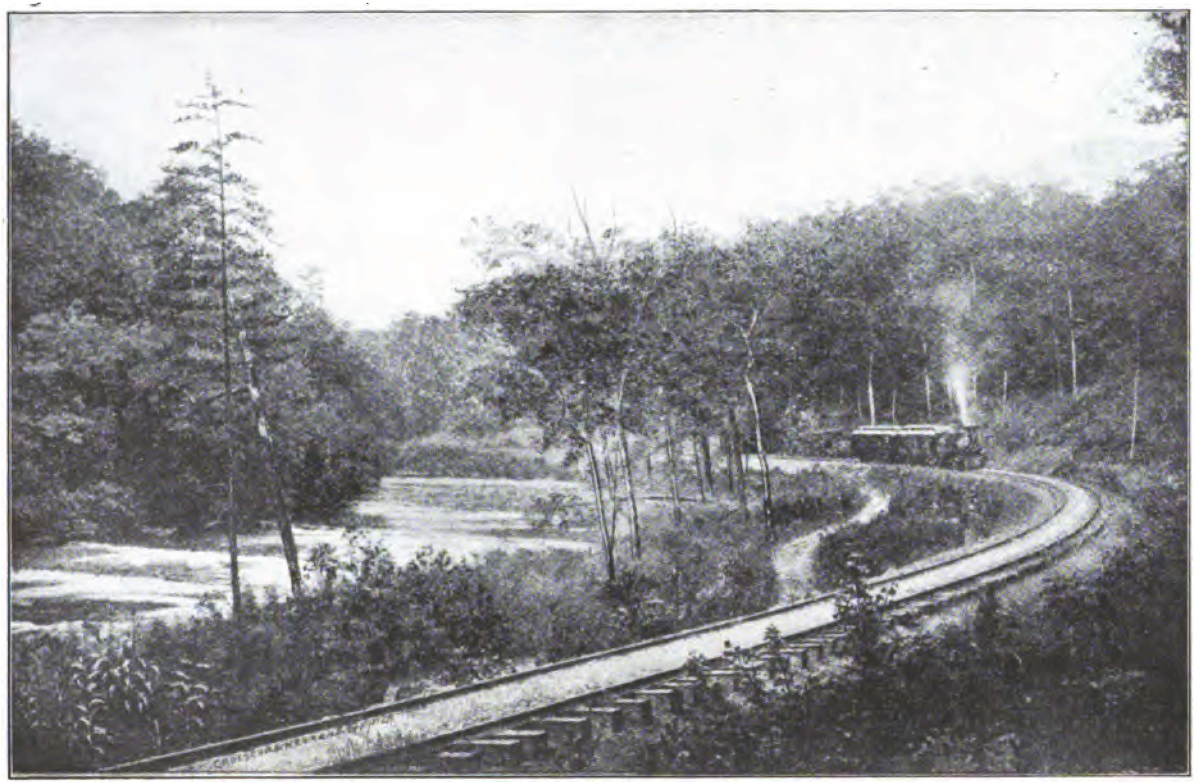
ALONG THE ROUTE OF THE NORFOLK AND WESTERN RAILWAY.

In no part of the state has the railroad created a greater transformation than that which has recently occurred along the southern border, and through the interior between the upper Kanawha and the upper Bluestone.

The Norfolk and Western railroad of Virginia emerged in 1881 as a result of the foreclosure sale of the unsuccessful Atlantic, Mississippi and Ohio railroad, which had been formed in 1870 by the consolidation of the Norfolk and Petersburg, the Southside, and the Virginia and Tennessee railroads. Organized primarily to develop coal, iron and other resources, and especially attracted by the discovery of good coal near the site of Pocahontas in Virginia, it began its existence by the purchase of the proposed New river railroad*—projected as a narrow-gauge to connect with the Chesapeake and Ohio at Hinton, but completed as a broad gauge which, ascending East river from New and passing along the valley of the Bluestone, penetrated the great Flat Top coal-field of Pocahontas coal. This New river division terminating at Pocahontas, selected partly with a view to later extension to the Ohio, was constructed in 1881-82, resulting in large shipments of coal by 1883. The Flat Top mountain extension down the Bluestone and up its western branches, begun in 1884, greatly increased shipments.

The original five-feet gauge of the western extension was changed

*General Gabriel C. Wharton, an ex-Confederate of Montgomery county, Virginia who had become impressed with the commercial value of the Pocahontas coal, by observing its outcrop on Flat Top mountain in 1872, secured from the Virginia legislature a charter incorporating the New River Railroad, Mining and Manufacturing company to construct and operate a railroad from New river depot in Puluski county on the line of the Atlantic, Mississippi and Ohio railroad to a point at or near the head of Camp creek in Mercer county and with provisions for building branch roads in Mercer and other counties. In 1875 experimental lines were surveyed from New river depot down the New river to Hinton on the Chesapeake and Ohio road. Shortly thereafter Colonel Thomas Graham of Philadelphia, who through friends got control of the majority of the stock and began work to secure all the coal land in the Pocahontas region, prepared to push the railroad which he decided to construct as a narrow gauge. He succeeded in securing the Virginia state convicts to assist in the construction.



Coming Down Tug River (N. & W. Railroad).

to 4 feet 9 inches on May 29, 1886, and the gauge of the main line was also changed on June 1, 1886.

The Elkhorn tunnel, following the famous coal vein through Flat Top mountain was begun in 1886 and completed in 1886.

The original northwesterly route to the Ohio, surveyed in 1886, via Elkhorn creek, Pinnacle creek, Clear fork, Coal creek and Mud river, was regarded unsatisfactory and was abandoned in 1888. The route adopted for the Ohio extension followed down Elkhorn to Tug, thence to Pigeon, thence up Pigeon and Laurel fork and across the divide to Twelve Pole, which was followed to its mouth at Ceredo. The difficult construction of this extension was begun in 1890, and the road was opened on November 12, 1892 by the completion of the Hatfield tunnel, eight miles east of Williamson. The Ohio river bridge was completed in 1891. Meantime, in 1890, the purchase of the Scioto valley railroad and the Shenandoah Valley railroad furnished additional terminal facilities.

The engineering problems, met and successfully solved in accomplishing the strategic purposes of the railway directors, resulting in the opening of vast previously secluded regions to the larger life of the works, were many and complicated. As the earlier problems were solved, subsequent ones arose in the necessity of perfecting the original road to meet the demands of increasing traffic.

A large portion of the original line of extension to the Ohio was remote from other railways, and, therefore, required cross-country transportation for men, sustenance and construction materials. From a financial standpoint, the venture was hazardous; and, therefore, the route was first located with considerable curvature to secure immediate economy of construction. From the necessity of revising both grades and curvatures the road was later practically rebuilt; and branches, sidings and double tracks were added to meet new demands.

In constructing the original line across from Naugatuck on Tug fork to Dingess and down Twelve Pole, the purpose of the management was to locate as near as possible to the Ohio a coal of good quality which could be easily transported to Kenova for shipment down the river on barges. Later, finding the earlier service too uncertain for the steady movement of traffic westward, and confronted with the necessity of a second track for the economical and prompt movement of the vast traffic resulting from the great development of the Pocahontas fields and the increasing growth of traffic toward the Northwest, the directors of the railroad decided to construct a second track along

the line of the Big Sandy which furnished a better grade for heavy traffic. This line, planned for an established and growing traffic, was constructed with less attention to the immediate economy illustrated in the numerous curves of the earlier route. It largely supplanted the old line, both for passenger traffic and for heavy freight traffic. The use of the old route is largely confined to local traffic, and to through trains of returning "empties."*

Branches were extended as follows: North Fork branch, 1894; Briar Mountain branch, 1902; Crane Creek branch, 1903; Low Grade line along the Big Sandy (Naugatuck to Kenova), 1904; Tug Fork branch to Gary, 1904, with extensions in subsequent years; Clear Fork branch, 1905; Widemouth branch, 1905; Dry Fork branch, 1906, with extensions in subsequent years; Spice creek branch, 1909; Poplaw creek branch, 1909; and Sycamore branch, 1911.

The influence of the road on the undeveloped regions through which the route was surveyed was remarkable. Regions, in which the managers of the road at first were unable to secure proper police protection, were developed into law-abiding communities by the influences resulting from the influx of people and the establishment of schools, churches and other social institutions.

In the entire region traversed by the surveyors, from the Elkhorn tunnel to the Ohio, in 1887-88 there was no village, excepting a small settlement at the mouth of Pond creek opposite the site of Williamson. Between the tunnel and the site of Welch there were no roads larger than a bridle-path or a sled-path, and thence along Tug fork to the site of Williamson the path was very poor. Throughout the region the population was scant and scattered, and the dwellings inferior.

The development in the vicinity of Williamson together with the inconvenience of communication with the county seat at Logan logically led to the formation of Mingo county from the southern territory of Logan in 1895.

In McDowell county, Welch was located on practically wild lands acquired in 1885 by John Henry Hunt and transferred in 1889 to Captain I. A. Welch, J. H. Bramwell and J. H. Juring who laid out the town, and in 1893 transferred the larger number of lots to the Welch Land and Improvement company. The arrival of the railroad in 1891, gave the town a steady growth and soon stimulated the old life and created a new life in the entire county, which was without bridges

*A proposition to remove the county seat of Wayne to a point midway between Ceredo and Kenova was defeated at a special election on February 6, 1906, by a vote of 2,566 against 1,148.

and wagons until 1880 and still had little more than bridle path communication in 1891. Land, which had only been worth $1.00 per acre, increased rapidly in value. The meagre exports of furs and ginseng were soon supplanted by vast exports of coal. The simple life of widely separated homes was rapidly disturbed by the increasing appearance of the evidences of modern highly-developed community life. Taxes, which in 1892 were only $4000.00 for the entire county, rose in proportion to the demands for the conveniences supplied through the agency of government.

The development along the railway in McDowell county determined the removal of the county seat* from Peeryville to the village of Welch. At the popular election held September, 1891, the question of relocation at Welch was settled by an overwhelming vote of 1455 against 145. The removal was delayed for another year by an injunction awarded George W. Payne to restrain and prohibit the removal of the county records to Welch. After bitter litigation for a year, the injunction was dissolved, and in October, 1892 the records were removed to a two-story house which was offered rent-free for two years. A commodious and substantial court house was built in 1894, and an annex was added in 1910.

In 1902, at Gary, the United States Steel Corporation completed one of the largest operating plants in the world, and subsequently built two branch lines of railway connecting with the Norfolk and Western in the Flat Top field.

On the crest of the Alleghenies, Bluefield, "the gateway to the Pocahontas coal field," has had a phenominal growth fostered by substantial business conditions. In 1888 it was a mere flag station on the farm of John B. Higginbotham. In December, 1889, it was incorporated as a town, with Joseph M. Sanders as its first mayor. Its population increased from 600 in 1890 to 4,644 in 1900 and 11,188 in 1910. Its post-office, established in September, 1887, was advanced to first-class rank in 1911. It has exceptional railway transportation facilities, and has promising prospects of becoming the center of a series of important electric lines. It is the official seat of the Appalachian Power company which owns five separate power sites on New river near Pulaski, Virginia, aggregating a total fall of 275 feet (75000 horse power).

*The first court in McDowell was held at the house of G. Washington Paine immediately below the site of Peeryville on Dry Fork. During the civil war, through the Republican influence of the Elkhorn side of the county, the county seat was removed to the Tug river, five miles above the site of Welch, and near the site of Wilcoe where the first court house was built. In 1872 it was relocated at Peeryville (now English).

The industrial awakening around Bluefield naturally produced some agitation in favor of removing the county seat from Princeton to the center of greater activities. In November, 1898, on petition of 1257 persons residing principally at Bluefield, Bramwell and neighboring places, the question was submitted to popular election, resulting in the defeat of the proposition by a large majority (882 for relocation and 2373 against). In March, 1906, the question was again submitted to election, resulting in a vote of 2098 for removal and 5174 against removal.

The development of the country traversed by the Norfolk and Western railway is indicated by the following table showing the growth of passenger business at certain West Virginia stations located on the road:

	Passengers Forwarded		Passengers Received	
	1893	1912	1893	1912
Bluefield	51,167	163,461	48,035	153,591
Bluestone	6,070	61,385	5,531	61,649
Coper	24,507	14,127	20,421	17,954
Bramwell	23,419	30,566	20,904	27,878
Simmons	18,061	17,275	22,815	19,813
*Mora	.....	12,204	.....	13,641
*Matoaka	.....	21,442	.....	21,341
Maybeury	20,063	26,847	24,438	29,533
Elkhorn	18,941	38,369	22,017	37,894
North Fork	9,196	128,449	8,024	124,805
Keystone	20,625	79,029	17,921	69,562
Eckman	7,210	15,342	6,366	20,007
Vivian	9,931	64,590	12,255	67,417
Welch	14,489	132,590	14,598	133,525
*Wilcoe	.....	16,904	.....	17,977
*Gary	.....	31,993	.....	45,152
Davy	2,822	23,870	2,847	25,679
Iaeger	2,747	36,427	2,719	32,949
*Berwind	.....	12,636	.....	10,290
Devon	1,347	10,257	1,653	10,639
Thacker	2,224	16,436	2,094	18,101
Matewan	3,857	24,864	4,269	25,677
Williamson	7,446	88,044	6,921	87,401
*Chattaroy	.....	18,786	.....	20,737
Naugatuck	2,274	14,311	2,229	16,693
*Fort Gay	.....	16,863	.....	16,693
Wayne	7,790	12,507	7,294	10,719
Kenova—Local	14,312	61,309	14,860	54,441
Kenova—Connection	1,948	6,339	2,550	8,429

*Not in existence in 1893.

THE VIRGINIAN RAILWAY.

Within the last decade, the wild region between the upper Kanawha and the upper Bluestone has been penetrated by the Virginian railway, which in West Virginia was begun in 1894 by the construction of a little five-mile road south from Deepwater on the Kanawha to serve certain lumber interests in the region. In 1902, the extension of this line toward the coal fields* was begun on a more careful plan

*The original certificate of incorporation of the Deepwater (January 28, 1898) called for a route from Deepwater up Lower Loup, across the divide and down White Oak creek and Dun Loup to its mouth at Glen Jean. Early in 1902, the management conceived the idea of a southeasterly extension through coal fields, from Glen Jean across the divide to Piney creek and up Piney to Flat Top mountain thence across to Camp creek and to Bluestone. This route was later changed (April, 1902) farther west, through Jenny's Gap and Clark's Gap in order to reach better coal territory. Finally, a preliminary survey was run connecting with Jenny's Gap (August 30). On the same day surveyors of the Chesa-

of construction, with a straighter alignment and lighter grades. In 1907, the ambitious and far-reaching plan of the release of the vast coal domain to the tide water came to fruition by the consolidation of the Deepwater railway of West Virginia and the Tidewater railway of Virginia, which were built together by the same management and incorporated as the Virginian railway.

The road was built by Mr. H. H. Rogers and his associates to secure the best possible line regardless of expense, or of connecting railways, or of adjacent towns. It was not built to get the revenue of immediate traffic but with a view to future possibilities inherent to the terminal and intermediate territory. Its main objective points were to penetrate the heart of the New River—Pocahontas and Kanawha coal fields which were not thoroughly served by existing roads, and to secure facilities for unloading coal at the tidewater terminal. Its course was selected by engineers who had a free hand to select a route, and to produce a line having the most economical grades and curves from the standpoint of operation. Its location and grades were determined only after the completion of five or six thousand miles of field surveys, and after the careful consideration of various ruling factors. Over much of its route from Deepwater to Princeton, the road has a succession of heavy cuts and fills, with many tunnels and high steel viaducts. Its easy grades toward the east were selected with a view to the heavier freight traffic in that direction.

In March 1907, its head of travel was Mullens. On July 1, 1909, it was in operation throughout its entire course. Its efficiency was assured by many improvements, and by the increased equipment which rapidly followed. Its assembling yard was located at Princeton, from which long trains of coal are drawn eastward behind huge Mallet locomotives.

At Pax, twenty-seven miles from Deepwater, it has a six-mile connection with twelve mines, by the Kanawha, Glen Jean and Eastern

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peake and Ohio appeared in Jenny's Gap, but the Deepwater projected their survey through the gap and staked off their line September 1 and 2, although the north end of the line, between Jenny's Gay and Glen Jean, had not yet been surveyed, nor had the Deepwater ordered or agreed to make the extension beyond either termini fixed by the articles of incorporation. On September 2, however, a meeting of directors passed a resolution of extension which was filed in the office of the secretary of state. On September 8, maps were filed. From the date of the contract with the Chesapeake and Ohio engineers, the Deepwater railway engineers and officials pressed the work of the location of the entire line and completed it on February 27, 1903—filing maps as fast as data could be procured and prepared.

The Chesapeake and Ohio, completed the survey of a route to connect with the old survey of 1899 and on September 11, 1902 filed a map of the projected location and on the same day filed a map of the old survey of 1899. On November 1, 1902, it completed the actual location of the new road. On October 2, it secured deeds to land in Jenny's Gap and about December 30, began the work of construction on the disputed strip, and prosecuted it at the cost of $8,500 until June, 1903, when the court of Raleigh county decided that the Chesapeake and Ohio had paramount right of appropriation. The Deepwater, by a writ of error, obtained from the court of appeals a reversal of the decision of the lower court.

railroad, owned and operated by William McKell. At Bishop, it connects with the White Oak railway from Glen Jean which is operated by the large New river company and carries the production of four mines. At Page, it receives the large exports of the mines of the Loup Creek Colliery company. At Mullens, it connects with the important Winding Gulf branch, along which are many important mines. It receives the shipments of large lumbering operations at Maben, Herndon and Gardner.

At Deepwater, the company planned at first to build a bridge across the Kanawha and Michigan in order to secure additional facilities for shipping coal.

XII. Social and Institutional History

1. POPULATION.

The character of the population has greatly changed since the civil war. The original settlers, whose ancestors were generally English or Scotch Irish or perhaps Pennsylvania German, were contented with a life of rural simplicity and hospitality whose economy was in many cases mere subsistence. Their descendants usually lived amiably with their neighbors, maintained their urbanity and self possession in the presence of strangers and, beyond the efforts necessary to secure the necessaries of life, were often disposed to leave improvement of things to time and chance. Always possessing intellect and sagacity capable of high development under favorable conditions, they have gradually responded to the progressive spirit of enterprise and of the strenuous life which received its greatest impulse from immigration from other states and from the increased opportunities for communication and intermingling of the people. The development of the vast resources, especially in coal and oil, has caused a large influx of population, at first largely average American citizens from Pennsylvania, Maryland, Virginia and Ohio, and later an increasing number of foreigners from Europe.

The population far more than trebled in the fifty years from 1860-1910. It increased from 376,688 in 1860 to 422,014 in 1870, to 618,457 in 1880, to 762,794 in 1890, to 958,800 (499,242 males and 459,558 females) in 1900, and to 1,221,119 (644,044 males and 577,075 females) in 1910, In 1869 and early in 1870 erroneous reports represented that the population and wealth of the state was decreasing. The census of 1870 showed that while there was a general increase of over 20% in the population of the state, there was a slight decrease in a few counties. There was a decrease of 794 in Greenbrier, 752 in Hampshire and Hardy combined, 615 in Marion, 169 in Nicholas, and 30 in Brooke. All the other counties showed an increase and every county at each census after 1870 until 1910 continued to show an increase. In the decade from 1890 to 1900 the population increased over 24 per cent. The counties in which it increased most rapidly were McDowell (156.8 per cent), Tucker (108 per cent), Webster (85 per cent), Clay (77 per cent), Marion (56.5

per cent), Fayette (55.7 per cent), Tyler (52.6 per cent) and Randolph (51.9 per cent). The counties in which the counties increased most slowly were Jefferson (2,5 per cent), Hampshire (3.4 per cent), Berkeley (4.1 per cent), Pendleton (5.2 per cent), Monroe (5.6 per cent), Mineral (6.6 per cent), Lewis (6.8 per cent) and Grant (7 per cent).

Of the population in 1900 the colored numbered 43,567 (including 56 Chinese and 12 Indians). The negroes were located principally in Berkeley, Cabell, Fayette, Greenbrier, Harrison, Jefferson, Kanawha, McDowell, Mineral, Ohio and Summers. Of the 247,970 males of voting age, only 14,786 were negroes. Of the illiterate voters 23,577 (11 per cent) were white and 5,583 (38 per cent) were black. The foreign born numbered 22,451 (principally Germans, Irish, Italians, English and Scotch) located principally in Marion, Marshall, Ohio, Tucker and Wood counties. Excluding foreigners, the larger number of immigrants came from Virginia (61,508), Ohio (40,301) and Pennsylvania (28,927).

After 1900 the immigration greatly increased, especially in the mining and manufacturing regions of the northern and southern parts of the state. The rapidity of the growth of towns may be illustrated by Morgantown whose population increased from less than 2,000 in 1900 to 10,000 within the city limits in 1910. In the decade from 1900 to 1910, the population of the state increased over 27 per cent. It increased most rapidly in the following counties: McDowell (155.3 per cent), Logan (108.1 per cent), Raleigh (106.1 per cent), Harrison (74.7 per cent), Pocahontas (72 per cent), Mingo (71.1 per cent), Mercer (66.7 per cent), Fayette (62.3 per cent), Cabell (59.6 per cent), Hancock (56.4 per cent), Nicholas (55.2 per cent), Brooke (53.7 per cent), Kanawha (48.9 per cent), Randolph (47.3 per cent), Tucker (39 per cent), Lincoln (32.8 per cent. In the following counties there was a decrease: Pleasants (13.6 per cent), Wirt (12 per cent), Tyler (11.2 per cent, Jackson (8.8 per cent), Doddridge (7.4 per cent), Ritchie (5.4 per cent), Mason (4.7 per cent), Gilmer (3.3 per cent), Hampshire (.9 per cent), Monroe (.6 per cent), Jefferson (.3 per cent).

It will be observed that the area of decreasing population includes some of the best agricultural counties of the state—indicating the demand for better roads and other improvements of rural conditions which will stimulate increased local production of the food materials now too largely imported for consumption within the cities and towns of the state.

The composition and characteristics of the population, as shown by the statistics of the census of 1910, present some interesting features.

Color and nativity.—Of the total population of West Virginia, 1,156,817, or 94.7 per cent, are whites, and 64,173, or 5.3 per cent, negroes. The corresponding percentages in 1900 were 95.5 and 4.5. In 42 of the 55 counties less than 5 per cent of the population are negroes; in only 4 counties does the proportion of negroes exceed 12.5 per cent, the maximum percentage, 30.6, being that for McDowell county.

Native whites of native parentage constitute 85.3 per cent of the total population of the state, and 90.1 per cent of the white population. Native whites of foreign or mixed parentage and foreign-born whites each constitute only 4.7 per cent of the total population.

Of the urban* population, 74.8 per cent are native whites of native parentage; of the rural, 87.8 per cent. The corresponding proportions for native whites of foreign or mixed parentage are 11.6 and 3.1 per cent, respectively. The percentage of foreign-born whites is 6.9 in the urban population and 4.2 in the rural; the percentage of negroes is 6.7 in the urban and 4.9 in the rural.

Sex.—In the total population of the state there are 644,044 males and 577,075 females, or 111.6 males to every 100 females. In 1900 the ratio was 108.6 to 100. Among the whites there was 110.5 males to 100 females; among the negroes, 132.8. Among native whites the ratio is 106.1 to 100, as compared with 261.8 to 100 for the foreign-born whites. In the urban population there are 104.2 males to 100 females, and in the rural, 113.4.

State of birth.—Of the native population—that is population born in the United States—80 per cent were born in West Virginia and 20 per cent outside the state; of the native white population, 17.8 per cent were born outside the state, and of the native negro, 57.6 per cent. Persons born outside the state constitute a larger proportion of the native population in urban than in rural communities.

Foreign nationalities.—Of the foreign-born white population of West Virginia, persons born in Italy represent 30.3 per cent; Austria, 14.6; Germany, 11.1; Hungary, 10.4; Russia, 9; England, 6.1; Ireland, 4; Scotland, 1.9; all other countries, 12.5. Of the total white stock of foreign origin, which includes persons born abroad and

*Urban population, as defined by the Bureau of the Census, includes that of all incorporated places of 2,500 inhabitants or more, the remainder being classified as rural.

also natives having one or both parents born abroad, Germany contributed 21.7 per cent; Italy, 18.5; Ireland, 11.5; Austria, 9.5; England, 9; Hungary, 6.6; Russia, 6.4; Scotland, 2.9.

Voting and militia ages.—The total number of males 21 years of age and over is 338,349, representing 27.7 per cent of the population. Of such males 93.2 per cent are white and 6.7 per cent negroes. Native whites represent 83 per cent of the total number and foreign-born whites 10.3 per cent. Of the 34,687 foreign-born white males of voting age, 7,263, or 20.9 per cent, are naturalized. Males of militia age—18 to 44—number 275,048.

Age.—Of the total population, 13.8 per cent are under 5 years of age, 22.8 per cent from 5 to 14 years, inclusive, 20.2 per cent from 15 to 24, 27.4 per cent from 25 to 44, and 15.5 per cent 45 years of age and over. The foreign-born white population comprises comparatively few children, only 6.9 per cent being under 15 years of age, while 69.9 per cent are 25 years of age and over. Of the native whites of native parentage 40.9 per cent are 25 and over, and of the negroes 46.5 per cent. The negro population comprises a somewhat smaller proportion of children under 5 than the native white of native parentage. The proportion under 5 is greatest among native whites of foreign or mixed parentage.

The urban population shows a smaller proportion of children than the rural and a larger proportion of persons in the prime of life. Migration to the city explains this at least in part. Of the urban population, 33.2 per cent are from 25 to 44 years of age, inclusive, and of the rural population, 26.1 per cent.

School attendance.—The total number of persons of school age—that is, from 6 to 20 years inclusive—is 393,818, of whom 259,971, or 65.5 per cent, attended school. In addition to these, 3,544 children under 6 and 3,896 persons 21 and over attended school. For boys from 6 to 20, inclusive, the percentage attending school was 64.9; for girls, 66.2. For children from 6 to 14 years, inclusive, the percentage attending school was 82.5. The percentage for children of this age among native whites of native parentage was 83; among native whites of foreign or mixed parentage, 82.9; among foreign-born whites, 66.1; and among negroes, 76.2. The percentage attending school for children of that age was 85.1 in the urban population, and 82.1 in the rural.

*Illiteracy.**—There are 74,866 illiterates in the state, representing

*The Census Bureau classifies as illiterate any person 10 years of age or over who is unable to write, regardless of ability to read.

8.3 per cent of the total population 10 years of age and over, as compared with 11.4 cent in 1900. The percentage of illiteracy is 6.4 among native whites, 23.9 among foreign-born whites, and 20.3 among negroes. Among native whites of native parentage it is 6.7 and among native whites of foreign or mixed parentage, 2.

Illiterates are relatively fewer in urban than in rural communities, the percentage being 4 in the urban population and 9.4 in the rural. For each class of the population separately, also, the rural percentage is higher than the urban—decidedly higher for the foreign-born whites and for the negroes.

For persons from 10 to 20 years of age, inclusive, whose literacy depends largely upon present school facilities and school attendance, the percentage of illiteracy is 4.1.

Marital.—In the population 15 years of age and over, 38.9 per cent of the males are single and 28 per cent of the females. The percentage married is 56.4 for males and 63.3 for females, and the percentage widowed 3.7 and 7.9, respectively. The percentages of those reported as divorced, 0.3 and 0.5, respectively, are believed to be too small, because of the probability that many divorced persons class themselves as single or widowed.

That the percentage single is so much smaller for women than for men is due partly to the excess of males in the total population, but mainly to the fact that women marry younger. Thus 15.5 per cent of the females from 15 to 19 years of age are married, as compared with 1.3 per cent of the males; and 57.9 per cent of the females from 20 to 24 years are married, as compared with 25.8 per cent of the males. In the next age group, 25 to 34 years, the difference is less marked, the percentage being 80.4 and 66.7, respectively, and it is inconsiderable in the age group 35 to 44. Among those 45 and over the percentage married is higher among the males. That there is a larger proportion of widows than widowers may indicate that men more often remarry than women, but, since husbands are generally older than their wives, the marriage relationship is more often broken by death of the husband than by death of the wife.

For the main elements of the population the percentages married among those 15 years of age and over are as follows: Native whites of native parentage, 58 for males, 63.1 for females; native whites of foreign or mixed parentage, 56.6 both for males and for females; foreign-born whites, 53.6 and 76.6; negroes 45.7 and 62.2

These percentages by no means indicate the relative tendency of the several classes as regards marriage. To determine that, the

comparison should be made by age periods, since the proportion married in any class is determined largely by the proportion who have reached the marrying age. Similarly, the proportion widowed depends largely on the proportion past middle life. The percentage married, both for males and females, is higher in rural than in urban communities.

Dwellings and families.—The total number of dwellings in West Virginia is 239,128, and the total number of families 248,480, indicating that in comparatively few cases does more than one family occupy a dwelling. The average number of persons per dwelling is 5.1, and the average number per family is 4.9.

The growth of population since 1860 is indicated by decades and by counties in the following table:

1860	1870	1880	1890	1900	1910	County	Formed
13,913	7,613	10,336	11,419	11,806	11,694	Hampshire	1754
12,525	14,900	17,380	18,702	19,469	21,999	Berkeley	1772
13,048	13,547	14,985	15,705	19,049	24,334	Monongalia	1776
22,422	28,831	37,457	41,557	48,024	57,574	Ohio	1776
12,211	11,417	15,060	18,034	20,683	24,833	Greenbrier	1777
13,790	16,714	20,181	21,919	27,690	48,381	Harrison	1784
9,864	5,518	6,794	7,567	8,449	9,163	Hardy	1786
4,990	5,563	8,102	11,633	17,670	26,028	Randolph	1787
6,164	6,455	8,022	8,711	9,167	9,349	Pendleton	1788
16,151	22,349	32,466	42,756	54,696	81,457	Kanawha	1789
5,494	5,464	6,013	6,660	7,219	11,098	Brooke	1797
11,046	19,000	25,006	28,612	34,452	38,001	Wood	1799
10,757	11,124	11,501	12,429	13,130	13,055	Monroe	1799
14,585	13,219	15,005	15,553	15,935	15,889	Jefferson	1801
9,173	15,978	22,296	22,863	24,142	23,019	Mason	1804
8,020	6,429	13,744	23,595	29,252	46,685	Cabell	1809
6,517	7,832	11,073	11,962	18,252	16,211	Tyler	1814
7,999	10,175	13,269	15,895	16,980	18,281	Lewis	1816
4,627	4,458	7,223	9,307	11,403	17,699	Nicholas	1818
13,312	14,555	19,091	20,335	22,727	26,341	Preston	1818
3,732	4,315	5,777	6,744	7,292	7,848	Morgan	1820
3,958	4,069	5,591	6,814	8,572	14,740	Pocahontas	1821
4,938	5,124	7,329	11,101	6,955	14,476	Logan	1824
8,306	10,300	16,312	19,021	22,987	20,956	Jackson	1831
5,997	6,647	11,560	20,542	31,987	51,903	Fayette	1831
12,937	14,941	18,840	20,735	26,444	32,388	Marshall	1835
4,992	6,480	9,787	13,928	18,904	23,023	Braxton	1836
6,819	7,064	7,467	16,002	23,023	38,371	Mercer	1837
12,722	12,107	17,198	20,721	32,430	42,794	Marion	1842
6,747	7,852	14,739	18,652	23,619	24,081	Wayne	1842
8,958	10,312	11,870	12,702	14,198	15,858	Barbour	1843
6,847	9,055	13,474	16,621	18,901	17,875	Ritchie	1843
8,463	9,367	11,455	12,147	14,978	16,554	Taylor	1844
5,203	7,076	10,552	12,183	13,689	12,672	Doddridge	1845
3,759	4,338	7,108	9,746	11,762	11,379	Gilmer	1845
6,703	8,559	13,896	16,841	22,880	23,855	Wetzel	1846
4,840	4,553	5,824	6,885	8,194	10,331	Boone	1847
6,301	7,794	11,375	14,342	17,330	18,587	Putnam	1848
3,751	4,804	7,104	9,411	10,284	9,047	Wirt	1848
4,445	4,363	4,882	6,414	6,693	10,465	Hancock	1848
3,367	3,673	7,367	9,597	12,436	25,633	Raleigh	1850
2,861	3,171	4,322	6,247	8,380	10,392	Wyoming	1850
2,945	3,012	6,256	7,539	9,345	8,074	Pleasants	1851
7,292	8,023	10,249	12,714	14,696	16,629	Upshur	1851
2,502	2,930	6,072	8,155	10,266	11,258	Calhoun	1855
1,787	2,196	3,460	4,659	8,248	10,233	Clay	1856
5,381	7,232	12,184	15,303	19,852	21,543	Roane	1856
1,428	1,907	3,151	6,459	13,433	18,675	Tucker	1856
1,535	1,952	3,074	7,300	18,747	47,856	McDowell	1858
1,555	1,730	3,207	4,783	8,862	9,680	Webster	1860
.....	6,332	8,630	12,085	12,883	16,674	Mineral	1866
.....	4,467	5,542	6,802	7,275	7,838	Grant	1866
.....	5,053	8,739	11,246	15,434	20,491	Lincoln	1867
.....	.....	9,033	13,117	16,265	18,420	Summers	1871
.....	.....	.....	.....	11,359	19,431	Mingo	1895
376,888	442,014	618,457	762,794	958,800	1,221,119	Total	

The growth of population in towns (of 2,000 or more) for the same period is indicated in the following table:

	1910	1900	1890	1880	1870	1860
*Wheeling	41,640	38,874	34,522	30,737	19,280	13,986
Huntington	31,161	11,923	10,108	3,174		
Charleston	22,996	11,099	6,742	4,182	3,162	
Parkersburg	17,842	11,703	8,408	6,528	5,546	2,433
Bluefield	11,188	4,644				
Martinsburg	10,698	7,564	7,226	6,335	4,863	3,014
Fairmont	9,711	5,655				
Clarksburg	9,201	4,508	2,802	2,517		
Morgantown	9,150	2,300				
Moundsville	8,918	5,362	2,688			
Grafton	7,563	5,650	3,159	3,030		
Elkins	5,260	2,016				
Benwood	4,973	4,511	2,934			
Wellsburg	4,189	2,588	2,235			
Keyser	3,705	2,536	2,165			
Hinton	3,656	3,763	2,570			
Williamson	3,561					
Chester	3,184					
Richwood	3,061					
Princeton	3,027					
McMechen	2,921					
Mannington	2,672					
Sistersville	2,684	2,979				
Charlestown	2,662	2,392	2,287	2,016		
Davis	2,615	2,391				
Thomas	2,615	2,126				
Buchannon	2,225					
Weston	2,212	2,560	2,143			
New Martinsville	2,176					
Salem	2,169					
Beckley	2,161					
Roncevert	2,157					
Monongah	2,089					
Piedmont	2,054	2,115				
Point Pleasant	2,045					
Keystone	2,047					
Follansbee	2,031					
New Cumberland	1,807	2,198	2,305			

*The population of Wheeling for the earlier decades was as follows: 914 in 1810; 1,567 in 1820; 5,221 in 1830; 7,885 in 1840; 11,179 in 1850.

2. EDUCATIONAL DEVELOPMENT.

In 1863 West Virginia had no state institutions, no social organs to secure general welfare, no common school system, no normal schools and no university. Before 1863 the few schools which were maintained at public expense were primarily for indigent children.* The people who had so long agitated the question of free schools for all,** influenced by Mr. Battelle who said that people were leaving

*Mr. Johnson of Taylor county, speaking in the house of delegates in 1850, cast the blame for the ignorance of the youth of the state on the East.

**In the constitutional convention of 1829-30, resolutions submitted by western members for the encouragement of public education were opposed by eastern men, some of whom feared the adoption of a system by which the people of the East would be taxed for the education of the children of the West. Morgan of Monongalia submitted a resolution that a tax of 25 cents per annum, levied on every free white man of twenty-one, together with an equal amount set aside by the legislature, should constitute a fund, the interest of which should be used for elementary education. Mr. Henderson remarked that at that time Virginia made provision for the partial or indifferent education of only one-eighth as many children as were provided with adequate education annually by the small state of Connecticut. Alexander Campbell also introduced a resolution for the encouragement of free schools and seminaries. But not one word on the subject of education was inserted in the constitution.

The *Kanawha Banner*, commenting on the general mortification which the West felt in securing none of her desired reforms, named three things which in its opinion

the state because there were no public schools, and consistent with the policy of the West, in 1863 inserted a clause in their constitution providing for their establishment, and promptly secured from their first legislature a law for efficient free schools supported by the interest of an invested school fund. In 1865, the state superintendent reported that there were 431 schools and 387 teachers in the state. In 1866 and 1867, provision was made for colored schools where the number of colored children was sufficient. The constitution provided that white and colored children should not be educated in the same schools.

The new school system encountered many obstacles. The law was opposed by many of the ultra-conservatives, who urged the people to disregard it and refused to cooperate with the authorities. In some thinly-settled counties of the interior and along the southern border the people were not able to build school houses. In several counties the superintendents were too ignorant to examine the incompetent teachers. In order to supply the great need for trained teachers, the legislature, in 1867, established normal schools at Huntington, at Fairmont and at West Liberty. In 1872, three additional schools were established at Shepherdstown, Athens and Glenville. By 1869, the school system was better organized; but, as late as 1872, over half of the county superintendents failed to submit reports, and the state superintendent reported that in many districts there had been no schools for two years while in many others the attendance continued to be poor. In many instances progress was hindered by misuse of funds by the school boards who voted themselves a liberal compensation for their services. In several counties, the sheriff often postponed the payment of the salary of teachers until they were compelled to sell their orders at great sacrifice to the curbstone broker, often a confederate of the sheriff. In spite of laws to prevent, this abuse continued for more than a quarter of a century. Examinations in many counties continued to be conducted so loosely and so dishonestly that incompetent teachers found little difficulty in securing

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would not greatly postpone a renewal of the contest between the two sections, and the first of these was the demand of the West for "a good system of education."

By 1840 the subject of popular education was much agitated in the West. A remarkable educational convention which met at Clarksburg on September 8-9, 1841 was attended by 130 delegates. Its object was to induce the general assembly to establish a system of free district schools, to be supported by the literary fund and a tax on property.

Throughout the West, by the time of the election for members of the constitutional convention of 1850, newspapers and candidates pledged themselves in favor of a constitutional system of education under which rich and poor should meet on an equality, and for the establishment of some form of an equitable system of common school education. But despite this fact and the resolutions of Martin, Faulkner and Carlile in favor of a constitutional provision, the new constitution was adopted without the mention of education.

NORMAL SCHOOL, HUNTINGTON.

View of the Campus, W. Va. University.

Old Woodburn Seminary.

Library, West Virginia University.

certificates. Finally, the widespread jobbery in teachers' certificates was almost terminated, in 1903, by the adoption of the uniform examination system.

In many counties, supervision of schools by the county superintendent remained a fraud and a farce for decades. An effort to secure more efficient supervision was made in 1901 by forbidding the county superintendent to teach, and in 1907 by increasing the salary of the office.

To secure better attendance the legislature in 1901 passed a compulsory school law which was made more effective in 1908. The opposition* to these laws, which was very strong at first, has gradually declined—although in many instances they are still disregarded or evaded.

Although progress was slow for so many years, it has been more rapid in recent years. High schools have increased in number and improved in character. The normal schools, whose work has been largely that of the high school, have begun to give more attention to the purpose for which they were formed. A state board of education, created by the revised school law of 1908, is empowered to prepare a course of study for the public schools of the state, and to unify and increase the efficiency of the school system by defining the relations of the different kinds of schools, and by securing better articulation of the school work. Teachers' institutes, summer schools, school libraries, better wages and better teachers are also aiding the progress of education.

West Virginia University since its foundation in 1867 has exerted a gradually increasing influence in the development of the education and other activities of the state. At first it was little more than a classical high school. For many years the growth of the new institution was very slow and uncertain. This retarded growth was due to many causes. Among these causes may be enumerated the partially local foundation, the sectional jealousies, the post-bellum political questions and partisanships, the lack of a satisfactory system of secondary schools, the divided responsibility and *laissez faire* policy of administration, and the lack of means of communication with

*In 1897, when the subject was strongly agitated, the Logan County *Banner* published editorials in opposition. "We are so confident that the parent is the proper guardian for his child, that we hope never to see the day when the state shall assume such guardianship except in extreme cases," said the editor. "Professor Lewis (who knows nothing about privations of parents in country districts) recommends that the schools be filled up by force, that the sacred precincts of an humble home be entered by the officers of the law, and children half-clad torn from their mothers. This is what compulsory school law means and we are heartily opposed to compulsory education!"

Morgantown, the seat of the institution. Gradually the power and importance of these causes were reduced by changing conditions. Industrial progress has been a prominent factor in the transformation of the earlier school into a real college or university. One may smile now at the earlier bickerings and driftings. The admission of women to the collegiate departments in 1889, and to other departments in 1897, was a great land mark in the educational history of the state.

Although many in the state do not now realize it the University is an institution of high rank—recently ranked by the Carnegie Foundation as better than the University of Virginia from the standpoint of entrance requirements.

The growth of the University has been greatly aided by the development of better secondary schools. The normal schools have partially solved the problem of suitable preparatory schools. A preparatory school at Montgomery, opened January, 1897, was established by an act of February 16, 1895. Another was established at Keyser by an act of 1901.

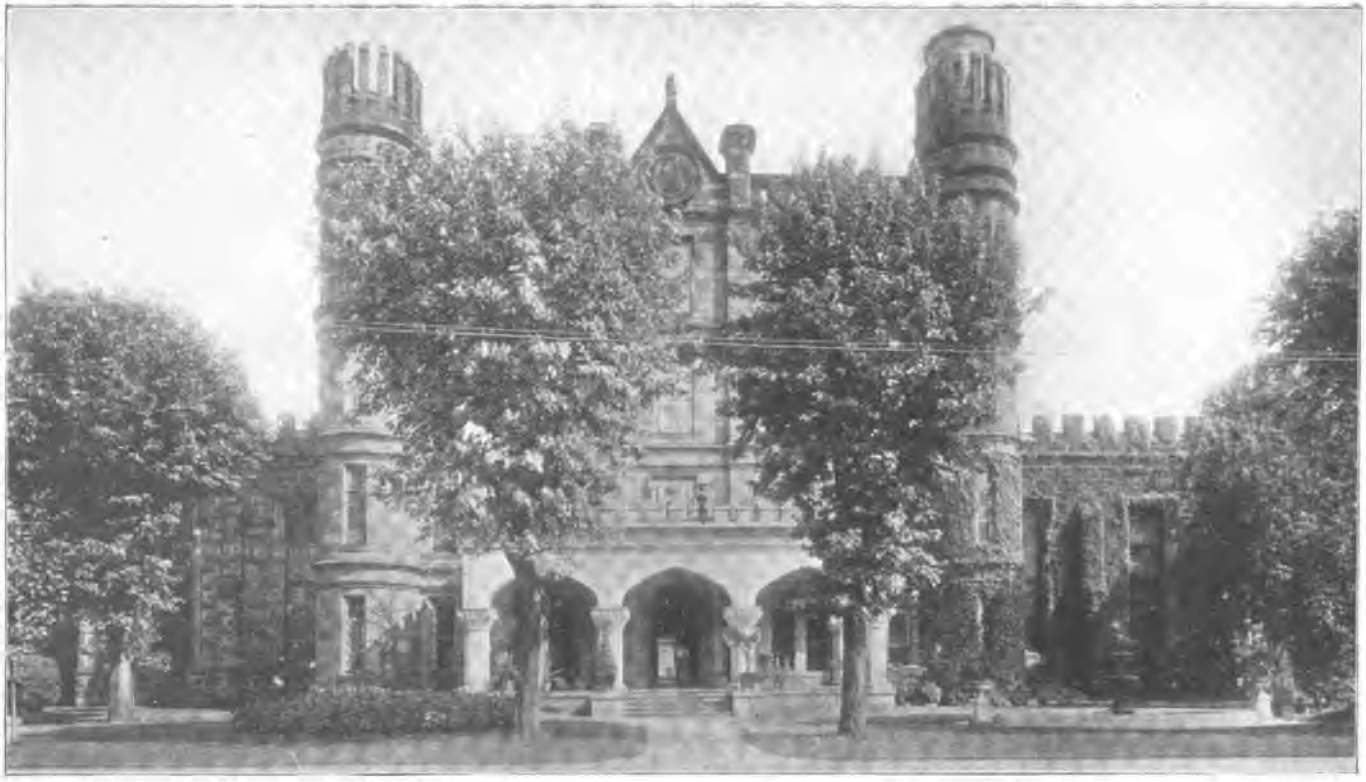
To supply the demand for state institutions where colored people could receive special or more advanced academic training, the colored institute at Farm (Kanawha county) was established in 1891, and the Bluefield colored institute (in Mercer county) was established in 1895.

3. INSTITUTIONS FOR DEPENDENTS, DEFECTIVES AND DELINQUENTS.

West Virginia at the beginning of her statehood had no charitable or reformatory institutions within her boundaries—all such state institutions having been built east of the mountains. The new state, without any permanent home or suitable buildings in which to conduct the work of its government, and in the face of so many other difficulties, was compelled to make temporary arrangements until she could provide something permanent. Many of the insane, who were already at Staunton, remained there until an asylum could be completed, but the county jails were filled with all kinds of unfortunates, the insane, convicts, and juvenile offenders of both sexes. For seven years arrangements were made with other states for the care of the blind.

The hospital for the insane at Weston was opened in 1866, but it did not furnish sufficient accommodation, and some of the insane were confined in the jails until the second hospital was opened at Spencer in 1893. There is still need of additional room for the colored insane.

HOSPITAL FOR THE INSANE, WESTON.



West Virginia Penitentiary, Moundsville, W. Va.

A school for the deaf and the blind was opened at Romney at the close of 1870. Since 1901 efforts have been made to induce the legislature to provide a separate school for the blind in some larger city of the state. In 1897 an asylum was established at Huntington for such incurables as epileptics, idiots, insane and others whose disorders affected their minds.

The legislature of 1911 created a tuberculosis sanitarium, located near Terra Alta on the top of the great Cheat Mountain range.

The necessity of establishing a state prison was urged by Governor Boreman, but the legislature first authorized negotiation with other states for the use of their prisons, and (when this proved unsuccessful) then authorized the governor to use the county jails, until in 1866 it was finally induced, by the escape of prisoners, to provide for a state penitentiary constructed in part by convict labor. In 1899 the unpleasant notoriety given to the state by exaggerated reports of the sickly details of a public hanging in Jackson county, which appeared in the yellow dailies of New York and other cities, caused the legislature to enact a law against public executions, requiring that all hanging should be conducted within the penitentiary and in the presence of a limited number of witnesses.

In 1890, twenty years after Governor Stevenson first protested against the necessity of confining youthful offenders (of both sexes) with persons whose lives had been given over to crime, the legislature established at Pruntytown a reform school for boys, the name of which was changed to The West Virginia Industrial School for Boys, by act of the legislature in 1913. In 1897, after further urging, it provided for a similiar industrial home for girls at Salem. The usefulness of this home is greatly lessened, however, by the great number of feeble minded girls who are kept there. Two years later, it established the West Virginia Humane society, one aim of which is to improve the condition of children under fourteen years of age who are abandoned, neglected, or cruelly treated. In 1901, it passed an additional act increasing the powers of the society. In 1899, it also provided for the construction and maintenance of three miners' hospitals (at Welch, McKendree and Fairmont) to which any person injured in a coal-mine or on a railroad is admitted free of charge. The growing feeling that there should be some means provided to prevent the imprisonment of youthful offenders in jails with other prisoners was recently expressed by Governor Glasscock, who also suggested the need, in some West Virginia cities, of juvenile courts with large discretionary powers.

Before West Virginia separated from Virginia, the care of her poor was directed by a board of overseers appointed from the various districts by the county court. From 1863 to 1873, the overseers, though really agents of the county board of supervisors, were elected by the people of each township. Following the constitution of 1872, the Virginia plan was revived. In 1881 the county court was authorized to provide a county infirmary, workhouse, farm, and other things necessary for the use and benefit of the poor. Since 1903, the messages of the governors have recommended measures to prevent abuses connected with the care of the poor, such as the assignment of their maintenance to the lowest bidder—a practice which still exists in some counties, and was strongly criticised in the last biennial message of Governor Glasscock (1913) who also said that in many instances the jails and almshouses of the state are a disgrace, referring especially to the unsanitary conditions which endanger the health and lives of the inmates.

4. INSPECTION AND REGULATION.

Executive agencies for inspection and regulation were developed rather slowly. In 1863 there was only a board of public works, consisting of the executive officials of the state, whose principal duties then related to state turn-pikes and taxation of railroads, but whose work has continued to grow with the development of the state. To relieve this over-worked board, Governor White in 1905 recommended a railroad commission, and in 1907 Governor Dawson recommended a commission of corporations to act with the state tax commissioner as a state board of assessors. An act of 1913 created a public service commission.

In 1864, a commissioner of immigration was provided by law, but without adequate compensation; and in 1871 the legislature, which was unfriendly to immigration, refused to make an appropriation for the commissioner and transferred the work of the bureau to the board of public works, without satisfactory provision for its continuance as an active agency. The governor reported in 1880 that foreign immigration into West Virginia for permanent settlement had "already commenced," and that several prosperous colonies were already founded. The first organized movement to promote immigration to the state, launched through the efforts of the Wheeling chamber of commerce, was begun on February 29, 1888, by the organization of the West Virginia Immigration and Development Association with plans for the organization of an auxiliary in every

county. Mr. John Nugent who at present—without compensation from the state—holds a commission to foster immigration of miners, has recently found his efforts blocked at New York and at Washington.

Although from 1863 there was a vaccine agent, and beginning with 1873 the law provided for three vaccine agents who were required to furnish vaccine matter to all who desired it, there was no provision for state control or regulation of health until 1881 when the legislature created the board of health to regulate the practice of medicine and surgery, and to enforce general sanitary measures for preventing, checking and confining epidemics and contagious diseases. The wisdom of this delegation of power has been proven often—notably at Mason City in 1892 in successfully dealing with what threatened to be an epidemic of smallpox. Although this board has sufficient authority, its efficiency has often been impaired by lack of sufficient funds. An act of March 15, 1882 made additional provision regulating the practice of medicine and surgery, by requiring genuine evidence of graduation from a reputable medical college or a regular examination before the state board of health, or an affidavit that the applicant has practiced in the state for ten years. Its enforcement was later contested on the ground that it violated the bill of rights and was unconstitutional so far as it interfered with the vested rights in relation to the practice of medicine. A practitioner at Newburg (in Preston) failing to procure the certificate required under the law was arrested on an indictment of the grand jury and found guilty in the circuit court (April 1883). On a writ of error he carried the case to the supreme court of appeals which affirmed (November, 1884) the judgment of the lower court on grounds of police regulation, asserting that "The doctor equally with the lawyer requires a special education to qualify him to practice his profession, and that the community is no more competent to judge of the qualifications of a doctor than of a lawyer and is liable to be imposed upon by imposters and quacks professing to practice medicine." Later he appealed to the United States supreme court which in January, 1889, decided against him on the ground that "the law of West Virginia was intended to secure such skill and learning in the profession of medicine that the community might trust with confidence those receiving a license under authority of the state."

In 1891 a commission of pharmacy was established (without provision for expenses), and the governor was authorized to appoint a board of dentistry (which by an act of 1907 is required to make a

report to the governor). A state board of embalmers was created in 1899.

In 1885, the legislature passed an act to prevent the manufacture and sale of mixed and impure butter and cheese. In 1907, it also enacted an inadequate law to protect the people against impure foods, which for years had been shipped into the state and sold. Although the law in itself is good it is rendered ineffective by the failure to appoint an inspector.

A proposition to submit to the people a prohibition amendment passed in the house by a vote of 59 to 14, in 1883, but was rejected in the senate by a vote of 15 to 11. In 1885 a similar proposition passed in the senate but failed in the house by two votes. In 1888, the question was submitted to the people and voted down. Finally, in response to the popular demand for elimination of the liquor interests from pernicious lobby politics, the legislature in 1912 submitted to the people, at the regular state and presidential election, a prohibition amendment which they ratified by a majority vote of over 92,000.

In 1882 an inadequate law for regulation of weights and measures was put on the statute book, providing for its execution through the county courts, fixing the legal weight of certain commodities, and establishing "Scribner's rule." In 1897 the section which provided that the adjutant-general should be *ex-officio* superintendent of weights and measures was repealed, and since that time there has been no provision for a superintendent. Except in a few instances, no attempt was ever made to enforce the law; and the outfit furnished by the Federal government, after a long residence at the state capitol, has recently been deposited with the department of physics at the state university where it has been tested for accuracy and mounted for use. A bill for more efficient state regulation of weights and measures received the approval of the house at the session of the legislature in February, 1913, but failed to reach the calender for consideration in the senate. On this subject there is much need of an efficient law providing for inspectors with not only power of supervision over local authorities, but also with power to enforce the law whenever local authorities fail to act.

The office of sealer of weights and measures should be one of the most important in the public service, affording a protection alike to the honest dealer and to the purchasing public. To secure efficiency in whatever law is passed, there should be some general system of administration and reports of inspectors, to prevent the chief office

from degenerating into a sinecure whose holder is paid a salary to see that no one runs away with the standards. These inspectors should visit every part of the state to test the official weights and measures and to instruct the local authorities. These officials should have power both to work in cooperation with the local authorities and, in case of emergencies which demand promptness of action, to enter the field of the local officials and to make inspections and arrests without waiting for local action.

The need of a more efficient organization of the militia of the state was felt long before the militia law of 1889. Soon after the close of the war, the law requiring muster and drill was abolished. In 1872, the legislature prohibited enrollment. In 1872, the duties of the adjutant-general were assigned to the state superintendent of education, who refused to exercise them. In 1877, the duties were transferred to the state librarian. In the summer of that year, the condition of inefficiency was forcibly illustrated in connection with the strike at Martinsburg, resulting from a reduction of ten per cent in wages by the railroad companies. The brakemen and firemen of freight trains stopped work and drove off the men sent to replace them. The police were powerless to cope with the situation. Of the three militia companies in the state, the company at Martinsburg was in sympathy with the rioters, one from Wheeling arrived but was fired upon and driven back, and one at Moorefield (38 miles distant from Martinsburg) was armed with a type of musket for which the state had no ammunition. The governor, seeing the hopelessness of controlling the situation with his slender militia forces, and the impossibility of assembling a legislature in time to take any action in the emergency, requested the aid of the national government, which was promptly given. Though several volunteer companies were organized after this disturbance, the state librarian and the governor urged that no efficient organization was possible without more adequate state provision for uniforms, target practice and encampment. Under the act of 1889, complying with an act of congress of 1887, a brigade organization of the National Guard was effected in 1890.

Beginning with 1879, as a result of industrial development, the legislature passed several important laws providing for regulation and inspection. In that year it passed an act providing regulations for the transportation of petroleum or other oils and liquids by railroad companies or transportation companies, and another for regu-

lating coal mines and the protection of miners. In 1883, it passed acts to prohibit timber obstructions in streams, to suppress prize fighting, to provide for fire escapes and other safety devices on hotels, and to provide for a mine inspector. In 1887, legislation was enacted to provide for the removal of dams from the lower part of the Elk and Guyandotte rivers; to prevent the employment in factories, manufactories, or mines, of minors under twelve who can not read or write; to regulate the working, ventilation and drainage of coal mines, to authorize the appointment of two mine inspectors, and to secure to laborers in mines and manufactories fortnightly payment of wages in lawful money. In 1889, legislation provided for a commissioner of statistics and labor, who as a result of his inspection of industrial establishments has continued to urge additional legislation providing for arbitration, an efficient child labor law, an eight hour day, payment of wages in lawful money, efficient factory inspection and regulation, safety appliances and other improvements or reforms in the general interest of labor. An act of 1890 created the office of chief mine inspector, who now has five assistants to aid him in visiting the numerous mines of the state. An act of 1891 created the office of state bank examiner, (now state commissioner of banking) to inspect and supervise the banks, which had been increasing rapidly in number and in amount of business, and had been entirely free from state regulation. A later act of 1907 authorized the commissioner of banking to extend his duties of supervision to the building and loan associations. The incorporation of these associations had first been provided by act of 1887, and the supervision of them had been urged by the governors and auditors since 1891; but they virtually operated without inspection before 1907.

Inspection of hotels was provided for in 1913.

The legislature of 1879 enacted a statute imposing a heavy penalty on persons transacting the business of insurance without authority. In 1882 Governor Jackson urged the legislature to protect the people against criminal life insurance companies, known as "graveyard" or "death rattle" companies which took unusual risks. Governor MacCorkle (in 1897) and subsequent executives recommended a provision for an insurance commissioner to secure better control of the operations of insurance companies, which after the inefficient laws of 1872 and 1879 obtained their certificates from the state auditor; but in every instance the legislature failed to act.

An act of 1875 providing for inspection of tobacco was repealed in 1879. The legislature which met in January, 1879, enacted a law

"Speciman Map of the Topographical Survey (Reproduced from Charleston Quadrangle)."

to protect farmers against spurious and adulterated fertilizers and provided for analysis of samples by the professor of chemistry at the University.

The creation of the state board of argiculture in 1891 has proved beneficial to the development of the agricultural interests of the state. Although a fish commission had been created in 1877, and a hatchery had been established at Romney and the game law revised in 1887, the first practical steps toward the preservation of the fish and game of the state was taken by the legislature of 1897 through a law for a state fish and game warden and subordinate local wardens.

Considering the intimate relation of geological knowledge to the vast resources of the state, it is surprising that the geological and economic survey—although urged by Governor Boreman in 1864, by Governor Stevenson in 1870,* by Governor Jacobs in 1875, and by successive governors—was not created until 1897, and that the first appropriation was only $3,000. Dr. I. C. White, the state geologist, a man of wide reputation, has continued to do the important work of the office without compensation from the state, but he receives liberal appropriations to support the work of the survey conducted under his direction.

Among the most recent offices created were those of state tax commissioner (1904) and highway inspector (1907). The former inspects the work of the assessors, justices, prosecuting attorneys, clerks of courts, sheriffs, constables and collecting officers, and has power to remove them from office for failure to do their duty. The appointment of the state highway inspector was the first practical step taken by the state to improve West Virginia roads, which have so long been repaired by the wasteful system of employing men who know nothing of the principles of road building.* The office was abolished in 1911; but several counties have taken a step toward better roads by the employment of a trained road engineer. The legislature of 1913 created a bureau of roads, consisting of chief road engineer employed at the University, the director of the state agricultural experiment station, and two other members appointed by the Governor. The law provides that the services of the chief

*Stevenson urged that at least a partial survey should be made to correct erroneous reports in regard to the decrease of the population and wealth of the state.

*In 1869, the commissioner of immigration said that the roads of the state were the most powerful incentive to emigration from the state. In 1896, the governor stated that the few good roads in the state were located in only five counties.

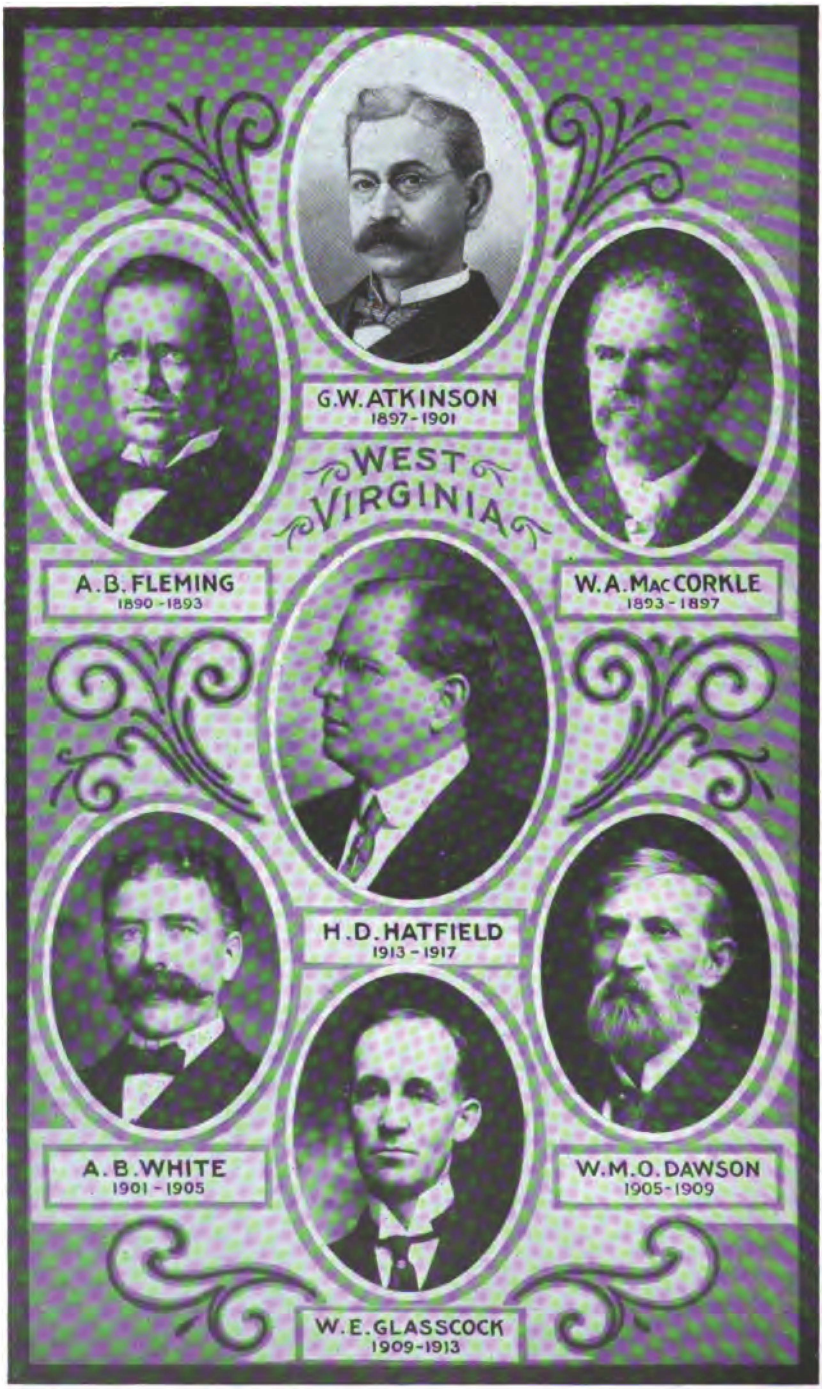
engineer may be obtained by county courts which make application.** In 1879 an act was passed authorizing the use of convicts on works of public improvement, including railways; and an act of 1913 provided for the employment of convicts to construct roads in the counties of the state.

Largely through the need of historical data for use in the Virginia debt case, the department of archives and history at Charleston was created by act of 1905, and considerable documentary materials were collected in subsequent years—resulting in the stimulation of the historical spirit, and possibly preparing the way for the future creation of a library reference bureau and other means of utilizing the past to aid in the practical solution of present legislative and administrative problems.

**The bureau has general supervision of all public roads, prescribes regulations as to duties of county engineers, enforces all laws and regulations relating to public roads and bridges, and especially their enforcement by road officials, aids and advises county engineers, collects, compiles statistics and disseminates information and analyzes road materials. It may require monthly reports of local road authorities and it may prepare maps showing location of roads. It is required to give instruction at least 10 days each year to county road engineers who are required to visit the office of the bureau to receive the instruction, at the expense of their respective counties. It has authority to establish and maintain stone quarries, crushers and brick kilns and to employ state convict road force.

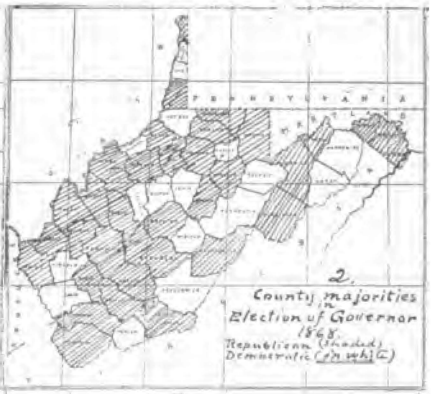
The chief engineer, appointed by the Governor, receives $3,500 a year for giving instruction in road building and for the performance of other duties assigned by the bureau; and his services are available to all county courts which request them. In addition to his salary he receives no fees except expenses when called to consult with county courts or to aid county road engineers. By approval of the bureau he may select such assistants as may be necessary. Their compensation is fixed by the bureau.

GOVERNORS OF WEST VIRGINIA.
(All Deceased)

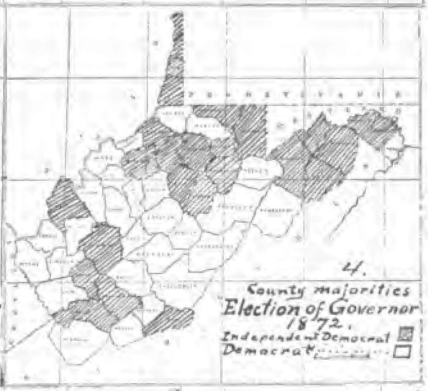


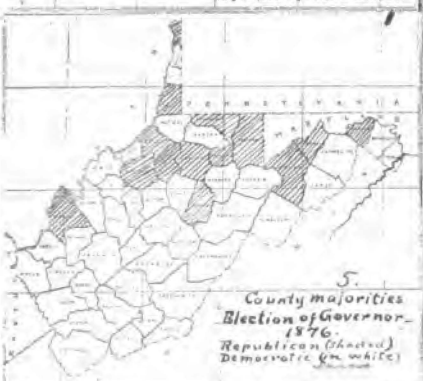
GOVERNORS OF WEST VIRGINIA.
(All living at time of Golden Jubilee, June 30, 1913.)

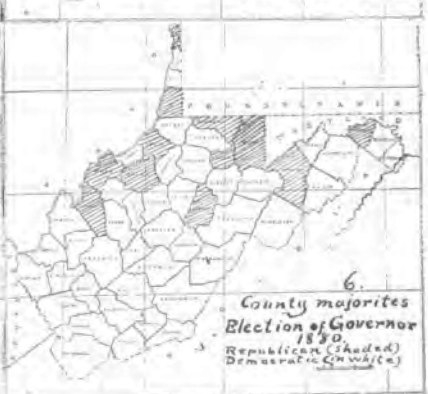
PENNSYLVANIA
1.
County majorities,
Election of Governor
1866.
Republican (shaded)
Democratic (in white)


PENNSYLVANIA
2.
County majorities
in
Election of Governor
1868.
Republican (shaded)
Democratic (in white)

PENNSYLVANIA
3.
County majorities
Election of Governor
1870.
Republican (shaded)
Democratic (in white)
No report from McDowell


PENNSYLVANIA
4.
County majorities
Election of Governor
1872.
Independent Democrat
Democrat


PENNSYLVANIA
5.
County majorities
Election of Governor
1876.
Republican (shaded)
Democratic (in white)


PENNSYLVANIA
6.
County majorities
Election of Governor
1880.
Republican (shaded)
Democratic (in white)

PENNSYLVANIA
7.
County majorities
Election of Governor
1884.
Republican (shaded)
Democratic (in white)

PENNSYLVANIA
8.
County majorities
Election of Governor
1888.
Republican (shaded)
Democratic (in white)

XIII. Political History

1. UNDER EARLY REPUBLICAN CONTROL.

In the election of 1864 there was no division of parties. There were only a few scattering votes in opposition to the officers of the state administration and to Republican candidates for Congress. Boreman was reelected without opposition, by a vote of 19,192. In 1866 he was again reelected by a vote of 23,802 against 17,158 for Benjamin H. Smith, his oppenent. In the election of 1868 William E. Stevenson, defeated J. N. Camden, in the race for governor, by a majority of 5,000. He was a man of liberal and vigorous progressive views, and continued the constructive policy of his predecessor, endeavoring to remove the deeply rooted prejudices against immigration and earnestly favoring liberal legislation to encourage projects of internal improvement and industrial enterprise which would engage the people of the state in the development of its resources and terminate the quarrels over past issues.

2. UNDER DEMOCRATIC CONTROL.

In 1870 although somewhat disconcerted by the adoption of the Flick amendment the Democrats elected John J. Jacobs to the gubernatorial office by a majority of over 2,000 votes over Stevenson and secured in both houses a working majority which they retained for a quarter century. Although his usefulness was somewhat restricted by certain limited views, Governor Jacobs was conservative and moderate in his policies. In 1872, he was supported by independent Republicans and reelected by a majority of 2,363 votes over J. N. Camden the regular Democratic candidate, in a campaign of caustic personal abuse. He devoted much attention to measures relating to the material development of the state.

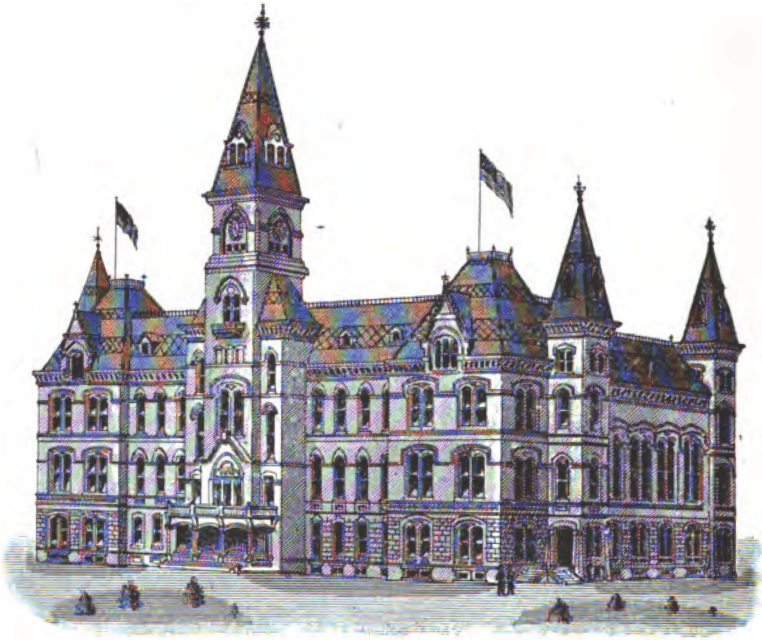
In 1873, the governor came into serious conflict with the legislature in regard to the appointing power of the executive department and the power of the legislative department to pass the act of January 14, 1873, creating the board of public works with appointive powers. At one time the conflict threatened serious public disturbance. It specifically arose from the action of the board in appointing (under

act of April 1, 1873) Mr. William L. Bridges as superintendent of the penitentiary to succeed Thomas P. Shallcross who held the place by appointment of the governor.

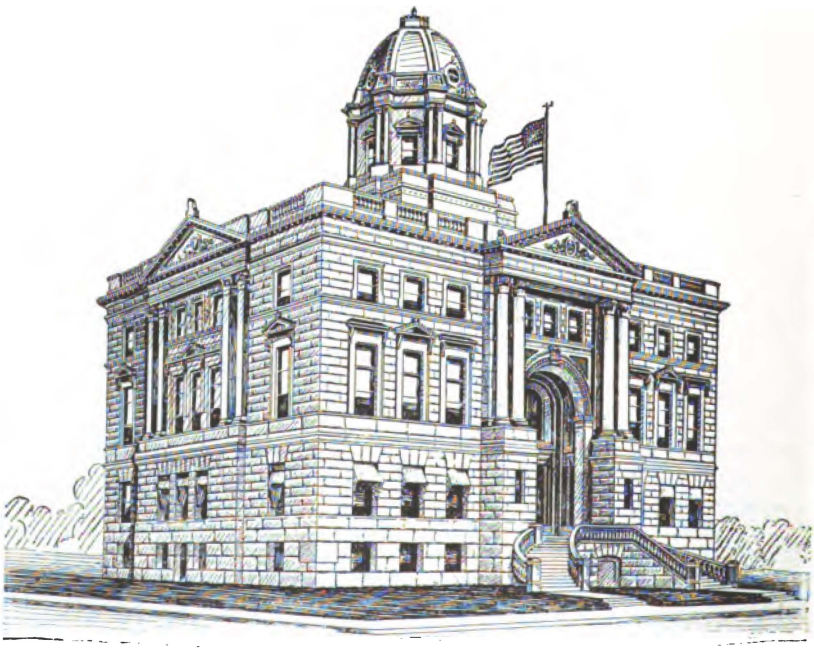
Having been duly qualified, the new superintendent in company with the board of directors presented himself at the penitentiary on May 1, the day fixed by law, and formally demanded possession of the place. He and the directors were met at the gate by Mr. Shallcross who refused to admit them; and on being asked the reason of his refusal, he produced a written document signed by the governor, "directing him to act as superintendent until further orders." He added that "he had received verbal orders to exclude all persons." Upon the threat of the board of directors to make their entrance notwithstanding his refusal, Mr. Shallcross warned them by declaring that, if they attempted to enter forcibly, he was prepared and resolved to use force on his part to prevent it, and to keep them out. At this they retired. A suit was soon instituted before the supreme court of ,the state, on complaint of Bridges against Shallcross to compel the latter to surrender the penitentiary to the complainant. The design of this action was not so much to decide the contest between the parties in the litigation as to determine whether the acts of the legislature out of which this contest acrose were constitutional and valid or unconstitutional and void. The matter came before the court in the July term of 1873. By the judgment rendered, Mr. Shallcross was ousted and by instruction of the governor obeyed the judgment in order to avoid conflict of authority.

During Jacobs' administration, prosperity was restricted by lack of a permanent location of the seat of government. To secure greater convenience of access, the capital, which on April 1, 1870 had been removed from Wheeling to Charleston, returned to Wheeling by act of February 20, 1875 which became a law without the signature of the governor.

In the exciting election of 1876 the Democratic state ticket o. eight persons, seven of whom had been in the Confederate army, was elected by a majority of from 12,000 to 16,000. H. M. Mathews, who defeated General Nathan Goff (the popular Republican candidate) for governor, was a patriotic, broad and liberal minded ex-Confederate who had fully accepted the results of the civil war and was well-fitted to lead in meeting living issues. His administration has been characterized as an era of good feeling in which the state began to show new signs of awakening life—especially in industrial develop-



STATE CAPITOL.



CAPITOL ANNEX.

ment. He adopted a liberal and sensible policy of appointing on administrative boards members from both political parties—a wise policy which unfortunately was abandoned by some of his immediate successors. During his administration a committee of inquiry investigated the question of discriminating freight rates of the Baltimore and Ohio railway and reported (January 15, 1879) that the Camden Consolidated Oil company had received especial advantages by a system of rebates.

Governor J. B. Jackson, who succeeded Governor Mathews in 1881, was an honest but partisan Democrat of the old school who in the election of 1880 received a plurality of 16,139 over George C. Sturgiss, the Republican candidate. [Jackson, 60,991; Sturgiss, 44,855; French (Union Labor), 13,027]. Jackson favored the enactment of laws that would encourage immigration, manufactures, and the development of the material resources of the state. He also attempted to secure reforms in taxation and state finance, by directing that all property not exempted by the constitution should be listed for taxation, and by the appointment of a tax commission (1883). During his administration, a period of general prosperity and happiness (excepting the calamitous results of the great floods of February, 1884), steps were also taken to revise the laws, some of which were indefinite and inconsistent.

Soon after the inauguration of Willis Wilson, who was elected in 1884 by a majority of 5,289 (in a total vote of 137,587), the capital was removed from Wheeling to Charleston—which became the permanent capital from May 1, 1885 (as determined by popular election of August, 1877). Under Wilson's administration, there was a continuation of the agitation for the revision of the tax laws in order to secure equality of taxation, and the governor also proposed legislation to reform the election laws, to prohibit oppressive trusts and combinations, and to prevent the distribution of railway passes to officers of the state and delegates to political conventions. The administration waged a fierce and relentless war against the trunk line railroads which, the governor said, had discriminated against the people of West Virginia in freight and passenger rates. To secure regulation of railway rates the governor called a special session of the legislature which, after heated debates and a close vote of 19 to 19 in the house (27 absent and not voting), dropped the further consideration of the subject and decided to await the result of the operation of the new national interstate-commerce law which had just passed congress and was approved by a joint resolution of both houses of

the legislature, and soon proved beneficial to West Virginia shippers.

The legislature, of 1887, attempted to elect a successor to J. N. Camden in the United States senate, but, after repeated ballots, adjourned without a decision and without passing the usual appropriation bills. The governor, on March 5, appointed Daniel B. Lucas to fill the vacancy in the United States senate; and, on April 20, called an extra session of the legislature which passed acts prohibiting the use of free railway passes by public officers and providing for the punishment of corruption and bribery at elections. Although the election of a United States senator was not included in the call, both houses on May 3 voted to ballot for a choice. After seven ballots without choice, beginning with Camden and Flick in the lead, on the eighth Charles J. Faulkner obtained 48 votes (against 23 for Flick) and was declared elected; and later, he was admitted to the United States senate, although Governor Wilson refused to sign his certificate of election.

Among the duties of the legislature which met on January 9 was that of counting the returns of the state election for governor, transmitted through the secretary of state from every county except Kanawha—in which they were held back by an injunction issued by the circuit court on application of the Democrat candidate who thereby would have received a small majority. The injunction having been declared invalid by the supreme court on January 12, the secretary of state on January 14 submitted the Kanawha returns, resulting in a majority of 110 for Nathan Goff (Goff, 78,904; A. B. Fleming, 78,798). The senate was unable to choose a presiding officer until January 21, after 126 ballots. Robert S. Carr, the Union-Labor senator, aided by the support of one Republican, Senator Minear, held the balance of power in the deadlock, and on the final ballot was elected president.

Against the vigorous protest of the Republicans the complete returns of the gubernatorial election were referred to a joint legislative committee which was authorized to take testimony and report at a special session. The legislature having adjourned on February 21, without any declaration of the results, Governor Wilson at the expiration of his term (on March 4) claimed the right to retain the office until his successor could be determined, and refused to retire at the demand of General Goff who had promptly qualified by taking the oath, or at the demand of Robert S. Carr (the president of the senate) who also claimed the office and demanded to enter upon its duties.

Mandamus proceedings in the state supreme court were at once begun against Governor Wilson by the other two claimants. The case of General Goff was decided on March 12, the court holding that the joint legislative convention of the legislature alone had power to determine the result of an election, and that General Goff was not the legal governor. The case of President Carr was decided on March 14, the court declaring that there existed in the office no such vacancy as under the constitution would authorize the president of the senate to succeed to the duties of the governor.

The joint committee completed its work in December. The majority report declared, by counting out 300 votes, a plurality of 237 for Fleming. This was signed by the three Democratic members. The minority report found no such frauds as charged by the majority, and gave a plurality of 140 to Goff. On December 18, Governor Wilson issued his proclamation calling an extra session for January 15. At this session the majority report, by a strictly party vote, was accepted and Fleming was declared elected.

The governor in his biennial message of 1889 emphasized the need of a registration law to remedy the fraudulent and corrupt voting which had been common in almost every county in the state.* In 1890, following the charges of bribery and fraud made by each party in the contested gubernatorial election, a special session of the legislature (called to consider thirty-seven specified subjects) enacted a law designed to prevent the purchase of votes, or other forms of bribery at elections, and to prevent ballot box frauds. The senate voted for an Australian ballot bill, which failed in the house (Democratic).

Governor Fleming continued the policy of his predecessor, who as a result of the contest had continued to act as executive for nearly a year beyond the term for which he was elected. He urged the taxation of the property of the Pullman company and other foreign car companies, and of the business of foreign telegraph companies operating in the state. He also recommended a general policy of legislation to preserve the resources of the state from monopoly, to foster agricultural interests, and to diversify the various industries of the state.

Governor William A. MacCorkle, who defeated Thomas E. Davis (the Republican candidate) by a plurality of about 4,000 (MacCorkle, 84,585; Davis, 80,663) in the election of 1892, was regarded as a liberal young leader. He urged legislation for the adjustment of state taxation, liberal appropriations to support the growing institutions of the state, and proper regulative machinery to meet the changing conditions. He cordially cooperated with the spirit of the

*"The capitations of 1884 were 133,522; and the entire vote after the most active political campaign ever made in the state was 137,527. The capitations of 1888 were 147,408, and the vote 159,440. The difference in the capitations and the vote in 1884 was 4,065. In 1888 it was 12,032. This shows an increase (in four years) of 21,853 votes—which, if legitimate, would indicate a population of 900,000, and an increase in four years of much more than 100,000. It is certain that no such increase had taken place."

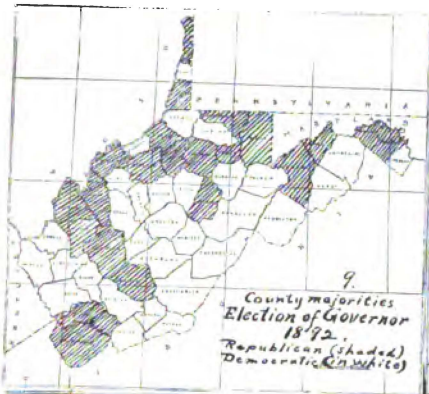
Republican legislature in favor of reorganizing the old partisan boards of state institutions and securing needed reforms "to give to the institutions the greatest degree of efficiency free from the influence of politics."

3. LATER REPUBLICAN ASCENDENCY.

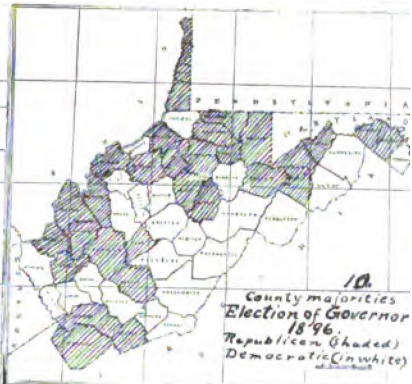
The Democratic majority, which had reached its highest point in 1880, had steadily declined after that date until it became the minority at the close of MacCorkle's administration. In the election of 1896, the entire Republican state ticket was elected. George W. Atkinson defeated Cornelius C. Watts for governor by a plurality of 12,070 votes (Atkinson, 195,629; Watts, 93,559). The legislature had already elected one Republican senator (S. B. Elkins) in 1895; and, in 1899, it proceeded to elect another (N. B. Scott). Governor Atkinson advocated policies for the improvement of the public schools, the improvement of roads by some system of permanent road building, the improvement of conditions of labor by state regulations, a radical amendment of the election laws, the encouragement of immigration, and other measures to meet the new and phenomenal industrial expansion in the state—which continued to influence political problems and policies in subsequent administrations.

In the election of 1900 Albert B. White, Republican, defeated John Homer Holt for governor by a plurality of 19,516 (White 118,798; Holt, 100,228). In 1904 William M. O. Dawson, Republican, defeated J. J. Cornwell by a plurality of 9,083. At the same time, the plurality for president was nearly 32,000, and for other state officers was nearly 25,000. Under both White and Dawson the extension of state regulation and the reform of tax laws furnished the largest questions in politics.

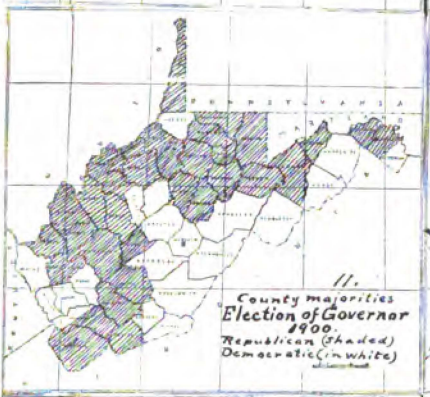
For a quarter of a century, although the constitution provided that taxation should be equal and uniform throughout the state, there was much complaint of the inequalities and injustice of the tax laws. A tax commission, created by the legislature of 1883, scathingly criticised and condemned the laws but without practical results. Although, in 1885, the legislature, which had never before exercised its powers under the constitution of 1872 to tax privileges and franchises, finally enacted a law taxing corporations, little was realized from it. In 1887, the legislature provided for an inheritance tax (2½%), but a defect in the law rendered it of little value. The first substantial reform in the old laws was made by the legislature of 1901, which largely increased the revenue from license taxes on charters or



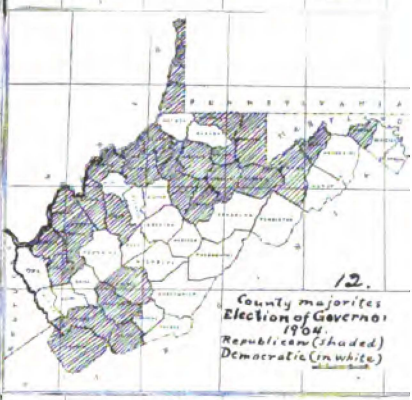
9.
County majorities
Election of Governor
1892.
Republican (shaded)
Democratic (in white)



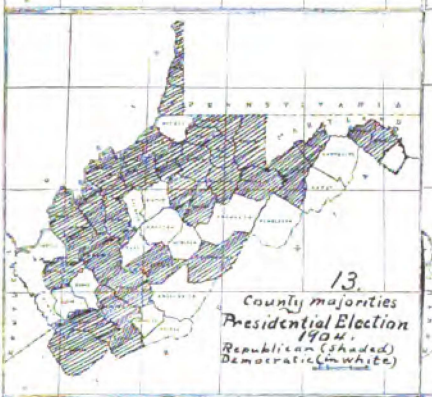
10.
County majorities
Election of Governor
1896.
Republican (shaded)
Democratic (in white)



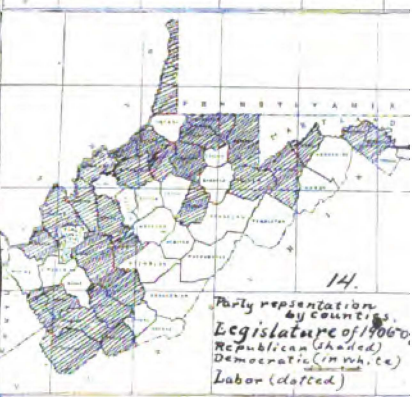
11.
County majorities
Election of Governor
1900.
Republican (shaded)
Democratic (in white)



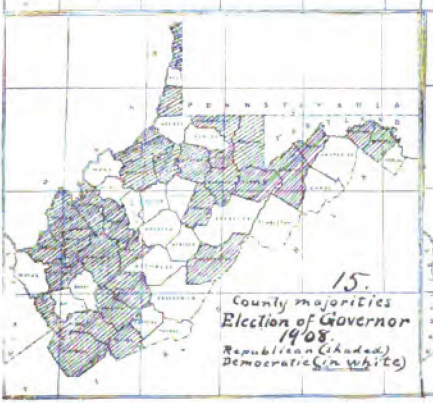
12.
County majorities
Election of Governor
1904.
Republican (shaded)
Democratic (in white)



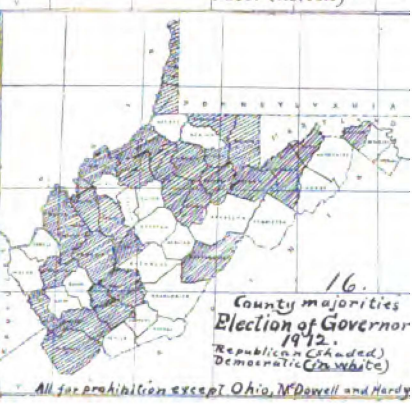
13.
County majorities
Presidential Election
1904.
Republican (shaded)
Democratic (in white)



14.
Party representation by counties.
Legislature of 1906.
Republican (shaded)
Democratic (in white)
Labor (dotted)

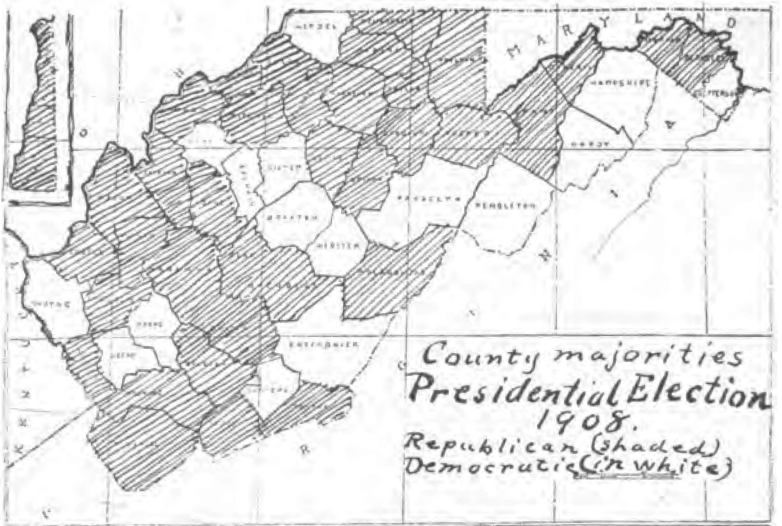


15.
County majorities
Election of Governor
1908.
Republican (shaded)
Democratic (in white)

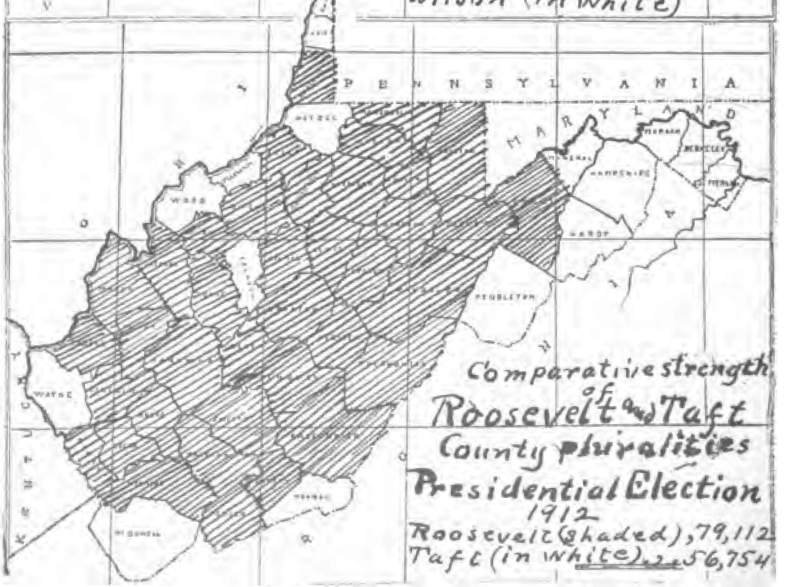


16.
County majorities
Election of Governor
1912.
Republican (shaded)
Democratic (in white)

All for prohibition except Ohio, McDowell and Hardy


MARYLAND
HAMPSHIRE
HARDY
PENDLETON
WAYNE
County majorities
Presidential Election
1908.
Republican (shaded)
Democratic (in white)

MARYLAND
HAMPSHIRE
HARDY
PENDLETON
WAYNE
County majorities
Presidential Election
1912.
Roosevelt (shaded)
Taft (cross shaded)
Wilson (in white)


PENNSYLVANIA
MARYLAND
HAMPSHIRE
HARDY
PENDLETON
WAYNE
Comparative strength
of
Roosevelt and Taft
County pluralities
Presidential Election
1912
Roosevelt (shaded), 79,112
Taft (in white), 56,754

corporations (regulating the rate according to the amount of authorized capital) and creating a tax commission to submit plans for further reforms. In 1904 the legislature at a special session created the office of state tax commissioner, and enacted a system of twenty-one tax laws which greatly lessened inequalities and practically provided for the extinguishment of direct taxes for the support of the state government after 1906. Although these reforms have been strongly opposed, it is generally recognized that with some modifications the reform policy will be sustained and continued.

The Republicans steadily increased in number and influence with the great industrial development of the state which was accompanied by a rather large and continuous immigration from North and Northwest, and with the fading of old traditions and the rise of new issues. In the face of their increasing strength, however, they endangered their prospect of success at the polls in 1908 by party dissentions, which resulted in two opposing state organizations of the party and two gubernatorial tickets. On the other hand, it was stated that the Democratic state convention (on July 30, 1908) weakened the chances of the Democratic state ticket by committing the party (by a vote of 712 against 411) to negro disfranchisement and "Jim Crow" cars. Within a month of the election, the Republicans, by agreeing to the withdrawal of rival gubernatorial candidates and the selection of W. E. Glasscock as the new head for their ticket, succeeded in electing their entire state ticket. Glasscock's plurality over Louis Bennett, the Democrat candidate, was nearly 12,000 (Glasscock, 130,807; Bennett, 118,674). The Prohibition candidate received 4,967 votes and the Socialist candidate 3,308. For presidential electors, the Republican plurality over the Democratic electors was over 26,000.

The beginning of Glasscock's administration was marked by a more centralized management of the finances of state institutions through the agency of a newly created board of control, which by liberal principles of economy reduced much waste of expenditure. In the latter part of his term, the most prominent public question was the prohibition amendment which was submitted by the legislature and ratified by popular vote in the elections of 1912. Near its close, his administration was called to face difficult problems connected with the strike precipitated by general mining conditions on Paint creek and Cabin creek in Kanawha county—resulting in the first declaration of martial law in the state and the appointment of a commission of investigation which recommended various legislative remedial reforms for the conservation of life, health and happiness, and for

the general welfare. The difficulties of the serious situation indicated that the executive should be vested with definite authority to compel local peace officers in disturbed districts to perform their duties under the law, and with power to remove or suspend officers who refuse or fail to execute the law. Governor Glasscock's last message was characterized by many progressive recommendations and suggestions to secure popular government and the proper conservation of resources and control of public utilities, to prevent lobbying and corruption in politics, to give labor its just compensation and to abolish the iniquitous fee system by a suitable county salary law. He emphasized the need of a constitutional convention to meet new conditions of rapid industrial development, and especially mentioned the need of a provision for the initiative and referendum and the propriety of a provision for womans suffrage.

Although time for deliberation on important public business was much abbreviated by a critical deadlock in the senate delaying the choice of a presiding officer, and by the attention given to the all-absorbing contest between candidates for United States senatorship, the legislature of 1913 enacted several very important laws—including the creation of a public service commission, a workman's compensation law, and provision for state regulation and control of the water power of the state. A bill to regulate weights and measures passed the house but died in the senate.

In the election of 1912, although the Democrats carried the state for presidential electors, the Progressive-Republican combination elected the entire state ticket led by Dr. H. D. Hatfield. In his inaugural address Governor Hatfield indicated that his administration would promote a program of progressive principles.

For over four months he devoted a large part of his energy to the solution of the serious industrial and political problems connected with the strike of miners on Paint and Cabin creeks, and to the establishment of conditions conducive to a permanent peace between miners and coal operators. By August, 1913, he was able to obtain an agreement by which the miners secured important concessions without imposing any unnecessary burden upon the operators.

In the inauguration of the work of the public service commission he has new opportunities for rendering particularly important service to the state. Deploring the waste of resources, he especially urges the conservation of the water power which promises to be a valuable resource of the future. He also has plans for improvement of roads.

XIV. Interstate Relations

Between West Virginia and her neighbors, since 1863, there have arisen several questions, two of the oldest and most prominent of which were recently settled by the United States supreme court.

1. MINOR QUESTIONS.

Among those of minor importance were: (1) the boundary question with Pennsylvania which was settled by a joint boundary commission in 1885-86; (2) the trouble along the Big Sandy boundary between West Virginia and Kentucky resulting from the Hatfield-McCoy feud which, after periodically disturbing the peace for several years, was terminated by the action of Governor Fleming in withdrawing the rewards which had been offered by West Virginia for the arrest of some of the McCoys; and (3) the question of transferring from Virginia to West Virginia the records of original grants of land in West Virginia—a question which was satisfactorily settled by negotiations of Governor Fleming. Among the later sources of friction along the boundaries of the state, the most recent is that resulting from the winding flow of the upper Bluestone along the southern border of Mercer, turning southward into Tazewell county, Virginia, before it resumes its flow northward through West Virginia territory into the New river. The passage of the sewage of Bluefield into the waters of this stream was offensive to the town of Graham, Virginia, which at first resorted to litigation but has recently agreed upon a more peaceful method of settlement by granting permission for Bluefield's sewers to pass through her streets to a lower point on the stream.

2. BOUNDARY DISPUTE WITH MARYLAND.

The boundary question with Maryland was an old one in regard to the meaning of the "first source of the Potomac," which in Lord Baltimore's charter was mentioned as a point from which to determine the western boundary between Maryland and Virginia. This was marked by the Fairfax stone at the head of Fairfax run of the North Branch in 1746 in accordance with the decision of the line in council, after a careful survey by a boundary commission. The North Branch had practically been accepted as the boundary several years

before the revolution, and again in 1785 and even later when Maryland claimed that her western boundary should be located a mile west of Fairfax stone, on the meridian of Potomac Spring, the most western spring of the North Branch.

Although in 1852 Maryland finally accepted the Fairfax stone as a point marking the meridian of her western boundary, in 1859 she secured a new survey of the meridian line northward which terminated at the Pennsylvania boundary about three-fourths of a mile west of the old line (surveyed in 1788) thus laying the basis of later controversies with West Virginia in regard to conflicting land claims and jurisdiction in the triangular strip between the two lines—some of which culminated in personal encounters and breaches of the peace which each state treated as a crime within its jurisdiction and attempted to punish.

Although West Virginia, wearied with the resulting "border war," in 1887 was willing to yield her claims to jurisdiction, Maryland ignored the terms of the proposition and three years later authorized a boundary suit before the supreme court. Into this suit the attorney-general of Maryland injected the old claim to the South Branch as the farthest source of the Potomac—a claim which if sustained would have extended the southwest corner of Maryland southward to the southern border of Pendleton county, thus completely dividing West Virginia into two non-contiguous parts. Governor Fleming, with the sanction of the legislature, employed counsel to defend the interests of the state against the claims of Maryland for territory which had been embraced within the limits of Virginia until 1863, and which had been in the undisturbed and exclusive possession of West Virginia and under her jurisdiction and control since 1863. After the suit was brought Maryland proposed arbitration; but West Virginia preferred to leave the settlement to the court.

Although her counsel in the recent suit submitted much documentary evidence bearing upon her title to the South Branch as her southern boundary, Maryland had repeatedly and in many ways recognized the North Branch as the boundary since her abandonment of her claim to the head spring of the South Branch in 1818 and had not really intended to raise the old question when she authorized the suit. Although the old claim was injected into the case, it was not pressed in the briefs and arguments submitted to the court in 1910 by the counsel for Maryland—probably because they saw that, even if the court should recognize her original right under the charter of

1632, she had little chance to recover the territory between the North Branch and the South Branch, against estoppel and the doctrine of laches and adverse possession. Admitting that the North Fork was "clearly marked by irresistable evidence as the main stream of the Potomac" they urged that its source was at Potomac Spring (over a mile west of the meridian of Fairfax stone) which should mark the western boundary of Maryland—although no line had ever been run from it before 1897, and the territory between it and the Deakin line was covered by Virginia patents, settled by Virginia citizens, and never under the jurisdiction of Maryland in any way.

Although the location of the Fairfax stone at the head of Fairfax run as the first fountain of the Potomac may have been against the plain provisions of the charter of Lord Baltimore, on February 21, 1910 the supreme court (Justice Day) rendered a decision recognizing the old Deakins line as the boundary between Maryland and West Virginia, beginning at a point where the north and south line from the Fairfax stone crosses the Potomac and "running thence northerly" to the Pennsylvania border. This decision was based on the prescriptive right arising from long continued possession of people claiming rights on the West Virginia side of the line, and the failure of all steps taken to delimitate the boundary established by the running of this line in 1788. (Md. v. W. Va., 217 U. S. p. 1-47). It was held that even if a meridian boundary line is not astronomically correct it should not be overthrown after it has been recognized for many years and become the basis for public and private rights of property.

On the basis of a previous decision (Morris vs. U. S., 174 U. S. p. 196) that the rights of Lord Baltimore included the Potomac to the high water mark of the southern or Virginia shore the court held that West Virginia is not entitled to the Potomac river to the north bank. This still left a difference of opinion as to whether the Potomac boundary should be located at low-water or high-water mark. Arbitrators appointed in 1877 to settle the boundary between Maryland and Virginia had agreed that the boundary contemplated by Lord Baltimore's charter was the right bank of the Potomac at high-water mark but in the light of subsequent events showing that Virginia had always used the south bank as though the soil to low-water mark had always been her own—a condition to which Maryland had assented in the compact of 1785—they decided to fix the boundary at low-water mark. On May 31, 1910 the court (Justice Day), agreeing with the opinion thus reached in the arbitration between

Virginia and Maryland, decided that, consistent with the continued previous excersise of political jurisdiction, the uniform southern boundary of Maryland was at low-water mark on the south bank of the Potomac to the intersection of the north and south line between Maryland and West Virginia—thus establishing the proprietary right of West Virginia on the south shore to low-water mark (Maryland vs. West Virginia 217 U. S. 577-585).

The survey and marking of the boundary in accord with the court decision was accomplished in 1812 by a joint commission.

3. THE VIRGINIA DEBT QUESTION.

The Virginia debt question arose with the formation of West Virginia, and has been a prominent factor or issue in state politics at various times. At the time of the separation, it was agreed that the new state would assume a just proportion of the public debt of Virginia prior to 1861 "to be ascertained by charging to it all the expenditures within the limits thereof and a just proportion of the ordinary expenses of the state government, since any part of said debt was contracted, and deducting therefrom all moneys paid into the treasury of the commonwealth from the counties included within the said new state, during the same period."

In 1866 Virginia appointed commissioners who, in case of failure to secure reunion of West Virginia to Virginia, were authorized to negotiate for the adjustment of the public debt and a fair division of the public property. The West Virginia legislature expressing a willingness for a prompt and equitable settlement, authorized the governor to appoint three commissioners to consider the adjustment of the debt question after the announcement of the decision of the supreme court in the case brought by Virginia for the recovery of Berkeley and Jefferson counties. In February, 1870, Virginia appointed a commission which went to Wheeling and induced the West Virginia legislature to appoint a similar commission to treat for the purpose of adjusting the question. The West Virginia commission, without any appropriation for expenses, failed to act; and, a year later when an appropriation was made by the succeeding legislature of 1871, Virginia, having changed her policy on the mode of adjustment, proposed arbitration by commissioners who should not be citizens of either state—a proposal which West Virginia declined.

The West Virginia commission, acting alone, went to Richmond examined such documents as were accessible, and reported that of the $31,778,877.62, which had been spent on internal improvements,

$2,784,329.29 had been spent in West Virginia. To the latter was added an additional $559,600 from other sources; and from the sum was subtracted a credit of $2,390,369.06, exclusive of taxes paid to the Virginia government, leaving a remainder of $953,360.23 in favor of Virginia. On the ground that the commission had been unable to secure complete data, and for other reasons, the legislature did not accept the conclusions.

In 1873, the subject was considered by the finance committee of the senate. On December 22 the chairman, J. M. Bennett, who had been auditor of Virginia for eight years, submitted a report showing that from 1822 to 1861 the state expenditures in counties in West Virginia was $3,366,929.29, that the counties of West Virginia had paid into the treasury of Virginia at least $3,892,000 besides an equitable portion of the ordinary expenses of the government, and that after subtracting from this sum the amount expended for internal improvements in West Virginia there was a remainder of over $525,000 in favor of West Virginia. This view was adopted by the people of West Virginia, who believing that they owed no debt, urged the basis of settlement which was persistently refused by Virginia.

In the meantime, in 1871, Virginia passed a funding bill, giving in exchange for the old bonds, new bonds for two-thirds the amount surrendered and certificates for the remaining third. These certificates indentified the holders of the unfunded part of the debt and were to be paid only as should be provided in accordance with the future settlement between Virginia and West Virginia. Thus Virginia became liable for these certificates as soon as she settled with West Virginia. In the later certificates of 1879, 1882 and 1892 however, there was a clause releasing Virginia from all liability. These Virginia certificates thrown on the market under the misleading name of "West Virginia certificates" greatly injured the financial standing of West Virginia and prevented immigration and investment of capital at a time when they were much needed.

In March, 1894, after Virginia had compromised and settled with her creditors and had been released from all liability, the legislature of Virginia adopted a resolution providing for the appointment of a commission of seven members to negotiate with West Virginia for the payment of the certificates and on the basis that Virginia was bound for only two-thirds of the old debt. In 1895 and in 1896, when the negotiations were proposed, West Virginia refused to accept the condition that Virginia should be held liable for only two-thirds

of the old debt. Again in 1900, Virginia, as trustee of the certificate holders, tried to secure an adjustment, but again on conditions which West Virginia could not accept. She then instituted a suit to secure an accounting and settlement under the supervision and direction of the United States supreme court. On various grounds, including lack of authority of the attorney general to bring the suit, the plaintiff's action as trustee for private individuals, lack of jurisdiction by the court, and lack of power to render or enforce any final judgment or decree in the case, the attorneys for West Virginia entered a demurrer which the court in March, 1907, through chief justice Fuller overruled "without prejudice to any question." The court in May, 1908, appointed a special master of accounts under whom the representatives of both parties to the suit collected data on the following subjects for presentation to the court:

(1) The amount and nature of the public debt of Virginia on January 1, 1861;

(2) the extent and assessed value of the territory of Virginia and West Virginia on June 20, 1863, and the population;

(3) expenditures made in the territory of West Virginia from the beginning of items constituting the debt;

(4) proportion of the ordinary expenses of government properly assignable to the counties of West Virginia for the same period, based upon the population and upon estimated valuation of property;

(5) all money paid into the treasury of Virginia, for the period prior to admission of West Virginia into the Union, from counties included within the new state;

(6) the amount and value of all money, property, stocks and credits which West Virginia received from Virginia, not included in preceding items and not acquired by Virginia after the date of the organization of the Restored Government of Virginia.

Evidence was presented to the special master at various meetings from November, 1908 until July 1909, and the arguments were concluded on January 1, 1910. The final arguments before the supreme court were presented in January, 1911; and, on March 6, the court rendered its decision, tentatively finding that West Virginia's share of the ante-bellum debt of Virginia amounted to $7,182,507.48. Later, on October 10, the court was asked by Virginia to determine all questions left open by the opinion rendered; but, on October 30, the court refused to proceed further in the case until West Virginia should have an opportunity to take further action through regularly constituted authorities (at the next session of the legislature.)

On February 21, 1913, the West Virginia legislature, by joint resolution, created the Virginia Debt Commission, composed of eleven members appointed by the governor, "to provide for arranging a settlement * * * * of a proper proportion of the public debt * * * * if any should be borne by West Virginia * * and to report its proceedings to the Governor," who is required under the resolution to convene the legislature promptly for consideration of the report.

In June, this commission, whose members were appointed by Governor Hatfield, was organized by the selection of Judge John W. Mason (of Fairmont) as chairman and John T. Harris (of Charleston) as secretary.

The boundry and debt controversies illustrate the close relation between past and present and the important of a study of the past as a preparation for understanding the present and for the solution of present problems.

The debt controversy, although some at first saw in it nothing more than a legal question, is largely historical in character at every point and its consideration before the Supreme Court has necessitated the study of historical materials covering a period of four decades before the secession of Virginia which furnished the occasion for the seperation of its northwestern counties to form a new state. In the presentation of the case before the Supreme Court the counsel for West Virginia was embarrased by the lack of a convenient collection of historical documents for the period under consideration and bythe lack of any reliable histroical treatment for use as a basis and a guide to futher investigation.

Stimulated by the necessities of the case, the state a department of archives and history and made liberal provision for the collection and preservvation of official publicatione, pamphlets, newspapers, and manuscript records. This collection, although its value is greatly limited by lack of suitable finding lists and indexes, has proven useful to the state beyond the limits of the debt controversy, and has furnished an impetus to the spirit of investigation through which past experience may be utilized in seeking solutions for the present problems of practical politics. Perhaps, by development into an institution primarily equipped as a legislative reference bureau to aid in securing more intelligent direction in legislation and in the various administrative activities of state and local government, this department of archives may compensate the state for any money loss incidental to the litigation of the decision in the perplexing debt case.

Retrospect and Prospect

A study of the long struggle for the possession and settlement of the trans-Allegheny region now included in West Virginia, the efforts to obtain communication with the larger world, the sources of widening sectional differences which prepared the way for the formation of a seperate state for which the civil war furnished the occasion, the social and political problems which confronted the new state in the period of reconstruction after the war, and the factors and rapidly changing conditions of the recent industrial revolution, impresses one with the fact that earlier ideals, and earlier problems of government, have greatly changed.

We owe a debt of gratitude to the self-reliant pioneers who served as the rear guard of the Revolution or as the advance guard of the Republic, to the later patriots who founded the mountain state with its eastern arm stretched out in defense of the national capital, and to the pioneers of the recent industrial development who, with foresight and confidence, and at great initial cost, opened the way to new enterprise. They toiled not in vain. The result of their work is our valuable heritage.

We owe also a duty to the present and to the future. If we have the spirit of the fathers we shall not allow blind veneration of the crystallized results of old issues, nor adherence to mere forms and meaningless shibboleths, nor the invidious and menacing ways of invisible lobbies of predatory interests, to block our progress in meeting the vital issues of a new age.

A deep realization of the struggle by which we obtained our liberties and our institutions is the firmest basis for a true patriotism and good citizenship, which finds its expression not in glittering generalities, but in an earnest effort to aid in the proper adjustment of wrong conditions and the solution of pressing problems. Revering the fathers, who in face of dangers paved the way for our liberties and our prosperity, we must also be alert to understand present duties. The experience of the past has shown that eternal vigilance is the price of liberty, and that a constant and intelligent interest and participation in public affairs is the surest safeguard to the preservation of self government.

The people of each generation have some new issues to meet. Those of the present, still maintaining what the fathers won,are struggling to secure social and industrial justice by righteous adjustments of evils which under changed conditions have resulted from the exploitive and wasteful race for riches in a period dominated by great (and often non-resident) captains of industry into whose hands the supply of natural resources have rapidly been absorbed without a fair return for the support of institutions which will be needed by the people long after the larger part of the wealth of forest and mine has been removed. In this period the early pioneer ideals of squatter sovereignty and the unregulated exploitation of "development" have broken down, and by force of necessity are

being replaced by the more recent ideal of social control through regulation by law—to secure the general welfare by placing restrictions on modern industrial captains and the rapacious industrial wolves and sharks and promoters of frenzied finance whose economic and political ideals have produced anomolous conditions for which the highest political intelligence of the state is urged to find and apply a remedy.

In seeking a defense for its continued existence, the new democracy can find it in the ability to secure the execution of an enlightened opinion through officials with functions adequate to grapple with existing conditions. It must secure legislation to curtail the special privileges of the strong, to protect the weak from injustice and inequalities, and to guard the interests of all. It must seek to make law the mother of freedom for all, maintaining a definite minimum of civilized life in the interest of the community (as well as the individual), a minimum of sanitation (and protection from accidents and frauds), a minimum of education, a minimum of leisure and of subsistence, and a minimum of efficiency in local governing bodies. It must select leaders with high standards of practical government and honest politics, with high and broad ideals of what constitutes service to the state, and with a dominant standard of success higher than the mere amassing of great wealth for the aggrandizement of the individual regardless of the conditions of its cost or of the civilization which results.

Among the recent factors contributing to the improvement of legislative conditions, and preparing the way for progressive legislation, is the prompt conviction of five members of the legislature for soliciting and receiving bribes of money in connection with the election of United States senator. In consigning to the penitentiary a group of political exploiters and mercenaries who, against the repute of the state, plotted a revival for a continuance of corrupt practices no longer condoned by an awaken public conscience (and generally condemned by a be better code of polotical morals), the court at Webster Springs has performed a wholesome service to the state. Fortunately for the welfare of West Virginia, which recently has achieved more than its share of distasteful notoriety, the machinery for exposing this disgraceful plot, the officials with courage to prosecute the offenders, and discerning juries and a fearless and determined judge, were not lacking The result is a necessary duty well done, and a notice served in the most salutary manner that bribe takers at the state capitol cannot safely expect to escape justice. As these sentences carry with them disqualification for office, the example set is complete; and the incident ought to have a decided influence for the purification of West Virginia politics.

West Virginia

1863-1913

By

Herbert Putnam.

A favored land,—
Secured against Atlantic's chilly blast
By Allegheny's steadfast mountain crest,
It slopes, through hill and dale and meadow vast,
To where a noble river on the west
Laves a low strand.

Its bosom deep
Garners rich store of Nature's wealth for man,
Sufficient for a generation yet unborn,
And generations still beyond, until the span
Of centuries shall reach their utmost morn
And final sleep.

Its shaggy hills
Bear forests lavish to his further needs
For warmth, for light, for shelter and for rest,
And copious streams encourage its broad meads
To yield obedient crops, at the behest
Of him who tills.

To such a land,
Awaiting yet the quickening touch of man,
Came hardy pioneer with axe and spade,
And hewed a pathway for the eager van
Of hardy settlers, who foundations laid
Divinely planned.

High-hearted he,
As one who bears his all upon his back:
With sinews firm, eye keen, and in his soul
Some portent that our present day may lack—
Some vision that the future may unroll
In majesty.

But not in peace
Nor solely with the arts that peace affords
Was he allowed fulfillment of his task:
Assailed by foreign foe, by savage hordes,
'Twas only by his gun and powder flask
He won release.

Not in the gaze
Of multitudes applauding, did he fight,
But lonely, 'mid a sullen wilderness,
Exchanging desperate day for treacherous night,
His hope no hero's grave, his aim still less
A hero's praise.

At last he won,
And found his toil's fruition in the sight
Of tranquil farms, by tranquil labor earned,
Low-weighted orchards, grazing herds, and fields alight
With golden grain, and willing sod upturned
To a glad sun.

And busy mill
That harnesses a torrent in its course,
Then lets it go rejoicing on its way—
Its service fit accomplished, yet its force
No whit abated, eager till it may
Still other tasks fulfill.

And hamlets rise
To towns, and towns to cities' teeming marts,
And cheerful homes, and every glad resource
For trade, for truth, for justice, and the arts
That sweeten and enrich man's intercourse
And stir his enterprise.

. . . . . .

And still there lacked
The consummation of a civic life;
Authority to manage its affairs
Free from all outside mandate, from the strife
Of interests conflicting with its cares,
Or grudging act.

For not a state,
Nor independent in her choice of law and deed,
Was West Virginia yet, but subject still
To a dominion foreign to her need,
Her aims misunderstood, her will
subordinate.

But never yet
Did Providence intend such thralldom to endure,
Or that communities in spirit variant,
Divided by a mountain chain secure,
Should find that chain a shackle, a restraint
By Nature set.

There came a day
When Fate decreed profounder issues still,
Issues that rent not mere opinion but men's souls,
Dividing kin from kin and friend from friend, until
'Neath hostile ensigns each his faith enrolls
In War's fierce fray.

Undreamed,
The conflict then, ere either might prevail,
And many a toil Death took with ruthless hand,
And many a hearth lay waste without avail,
And many a head was bowed, before the land
Emerged, redeemed.

But when it did,
It held a nation newly purified,
Of passion rid,
A people newly welded into one—
By common heritage of anguish borne—
By common pride
In Faith well kept, in Duty nobly done;
If more enduring in the cause that won,
No less heroic in the cause that died:
And, last, by equal share
In every boon the future might contain

For a great land returned to peaceful ways,
A land no more by discord rent in twain,
But free to choose the exit of its days—
And, confident in union, free to dare
Such destined ills as Fate must needs ordain.

. . . . . .

We, intimate
Participants in all this hope, as in the strife
And woe preceding, *we* found one boon more;
For from that womb of woe there sprang new life—
The free and corporate life, denied before;
And West Virginia then, baptized in war,
Proclaimed by trumpet peal and cannon roar,
Uprose at last, a State!

Achieved her great desire,
She did not hesitate,
Nor did she wait
The final issue of that contest dire—
Holding aloof until the event should prove
Under which flag discretion safe might move—
But as she stood, blood-soaked, and bathed in fire,
With ancient faith elate,
She chose her ensign, and high upward flung
Her gage—a star—to join the cluster which still hung
To Union dedicate.

. . . . . .

Today we celebrate
The ripe achievements of our fifty years:—
The mastery
Of forest, field and mine, the mill which rears
Its bulk o'er many a stream, the forge and factory's
Incessant hum,
The railways linking mart to mart and home to home,
The growth of trade in each emporium,
And other wealth material that has come
To bless
Our subjugation of a wilderness,
And mien undaunted in a time of stress:—
All these we proudly sum.
The pride is just; but let it not ignore
Our progress in the things that count for more
In strengthening a state
Than wealth material won.
Let it relate what we have done
To further Education, and promote
An understanding near of things remote.
What may we claim
Of those fine civic traits which earn the name
Of a great commonwealth,
And are the tokens of sound civic health?—
Respect for law, to each his equal chance,
For variant opinion, tolerance;
Yet in the issues real
That touch the common weal
Conscience implacable, that alike defies
The bribe, the threat, or coward compromise.

And most of all,
As we survey the decades since our birth,
And count our present worth,
Let us recall
The hardy virtues that first cleared the ways
To these abundant days;
Nor, in the privilege
Of statehood which has brought us where we are,
Forget the pledge
Implied when first we set our eager star
Amid the galaxy
That crowns the ensign of a Nation free:

The pledge to keep the star forever pure
By probity of purpose and of deed;
In home and court and office to abjure
The sordid aim, the cloudy arts of greed;
Keep clean and straight
Our private ways; and dedicate
The best that in us lies to serve the State:—
So that the light symbolic of that star,
By us replenished still, shall constant be,
And carry far
The noblest radiance of Democracy.

APPENDIX A.

RIVALRY FOR HEADSHIP ON THE OHIO.
(ILLUSTRATED IN THE WHEELING BRIDGE CASE.)

The Wheeling Bridge Case in the Supreme Court in 1849-52 and 1854-56 is as interesting through its relations to the industrial history of the period as it is from the standpoint of constitutional questions involved. Its study introduces us to the earlier rivalries of coast cities to secure the trade of the West, the systems of internal improvements planned to reach the Ohio, the development of trade and navigation and the extension of improvements and regulations by Congress on the Ohio, and the rivalries of Pittsburg and Wheeling to obtain the hegemony by lines of trade and travel converging and concentrating at their gates.

Pennsylvania was early interested in plans of internal improvements to connect Philadelphia with Pittsburg and the free navigation of the Ohio. Occupying a central position, resting eastward on the Atlantic, north on the Lakes, and flanking on the Ohio which connected her with the Gulf and the vast regions of West and South, she had advantages over other states for both foreign and domestic commerce. These advantages she cultivated from the earliest period. In 1826, influenced by the improved conditions of steam navigation on western waters, by the effects of the Cumberland road in diverting to Wheeling much of the westward travel which had formerly passed down the Monongahela to the Ohio at Pittsburg, and by the success of the Erie canal which also diverted travel and trade from Pittsburg, she began a system of canals to connect the Atlantic and the Lakes with the Ohio, which had begun to bring to her western gates the commerce from the Gulf and the Mississippi, and at great expense and sacrifice, she forced her way westward, from the end of the horse railway at Columbia, up the Juniata to Hollidaysburg. Then in 1835 by an inclined plane portage railway for thirty-eight miles across the Appalachians, at the base of which other enterprises halted, she connected with the western canal from Johnstown to Pittsburg. Over this route she transported both passengers and goods, carrying to eastern markets the rice, cotton and sugar of the South, the bacon and flour of the West, and the furs and minerals of the Northwest. In 1844 her connections with the Ohio were improved by a packet line established between Pittsburg and Cincinnati. By 1850, these improvements, together with her interest in a slack water navigation from Pittsburg to Brownsville and up the Youghoigheny to West Newton, and the improtance of the ship-building industry at Pittsburg, made her watchful of the problems of navigation on the Ohio. At the solicitation of her legislature, and to meet the needs of growing commerce, Congress, beginning its policy of

improvement of Ohio navigation in 1824, had appropriated large sums by 1850 to remove obstruction in the river.

In the meantime, Wheeling, whose growing importance had received its first stimulus from the completion of the Cumberland Road to the Ohio in 1818, threatened to rival Pittsburg in prosperity, wealth, and greatness, and to become the head of navigation on the Ohio as well as the western terminal to the first railway to reach the western waters from the East, and a center of other converging lines from both East and west. After persevering efforts of nearly a quarter century, she scored her greatest victory by securing the route of the Baltimore and Ohio Railway whose charter of 1827 had prohibited the termination of the road at any point on the Ohio below the Little Kanawha and whose engineers on reconnaissance and surveys in 1828 had considered several routes terminating on the Ohio between Parkersburg and Pittsburg. Coincidently, after the unsuccessful efforts of over half a century she secured the first bridge across the Ohio, a structure which she regarded as a logical link and incidental part of the national road, and a fulfilment of the provisions of the act of 1802 by which Ohio had been admitted as a state, but which Pittsburg regarded as an injury to navigation—obstructing it much more effectively than Congress had been able to improve it by her recent expeditures of public money.

The story of the efforts to obtain the bridge is a long one, reflecting the industrial progress and energy of the West and the evolution of national policies and punctuated with the spice and pepper of rival memorials and resolutions. In 1816, during the construction of the national road from Cumberland to the Ohio, the legislatures of Virginia and Ohio incorporated the Wheeling and Belmont Bridge Company and authorized it to erect a bridge which, however, was to be treated as a public nuisance liable to abatement if not constructed so as to avoid injury to navigation. Unable to raise funds necessary for the work, the Company in 1830 asked for a national subscription to the bridge, and its request received a favorable committee report in the House. Two years later citizens of Pennsylvania submitted to the House a memorial against the erection of the bridge.

Under the old charter of 1816 the company in 1836 built a wooden bridge from the west end of Zane's Island to the Ohio shore, leaving the stream east of the island free to navigation. At the same time petitions to Congress backed by resolutions of the Ohio legislature, urged the construction of the bridge over both branches of the stream in order to facilitate trade and travel and to prevent inconvenience and delay in transporting the mails by the ferry, which was frequently obstructed by ice and driftwood and especially so in the great floods of 1832. A congressional committee on roads and canals made a favorable report recommending the completion of the Cumberland road by the erection of the bridge; but the objection was made that the bridge might prove an obstruction to the high chimneys of the steamboats, whose convenience Congress did not think should yield to the benefits of the bridge. In 1836, government engineers, after a survey made under the direction of the war department, presented to Congress a plan for a suspension bridge

with a moveable floor which they claimed would offer no obstruction to the highest steamboat smoke-stacks on the highest floods, but the plan was rejected. In 1840 the postmaster general recommended the construction of the bridge in order to provide for safe and prompt carriage of mails which had been detained by ice from seventeen to thirty days each year; but his recommendation was buried in the archives.

Early in 1844, Pennsylvania, awakened by the fear of plans to make Wheeling the head of navigation, became more active in her opposition to what seemed an imminent danger to her interests and the interests of Pittsburg. By action of her legislature she opposed the request of Wheeling and the Ohio legislature for national appropriations to construct the bridge and soon took new steps to secure the construction of a railroad from Harrisburg to Pittsburg. Nevertheless, the House committee on roads and canals, deciding that the bridge could be constructed without obstructing navigation, reported a bill making an appropriation and submitting a plan of Mr. Ellet for a simple span across the river, at an elevation of 90 feet above low water; but those who spoke for Pennsylvania urged the specific objection that 90 feet would not admit the passage of steamboats with tall chimneys and defeated the bill. In vain did Mr. Steenrod, the member from Wheeling, propose hinged smoke stacks for the few tall-chimneyed boats, and press every possible agrumnt in favor of the bridge. Opposition to the bridge increased after 1845 with the increase in the size of the Pittsburg steamboat smoke-stacks—an improvement by which speed power was increased through increased consumption of fuel.

Baffled in her project to secure the sanction and aid of Congress for a bridge which Pennsylvania regarded as a plan to divert commerce from Pittsburg by making Wheeling the head of navigation, Wheeling next resorted to the legislature of Virginia in which the remonstrating voice of Pennsylvania could not be heard. On March 19, 1847, the Bridge Company obtained from the legislature a charter reviving the earlier one of 1816 and authorizing the erection of a wire suspension bridge, but also providing that the structure might be treated as a common nuisance, subject to abatement, in case it should obstruct the navigation of the Ohio, "in the usual manner" by steamboats and other crafts which were accustomed to navigate it. Under this charter the company took early steps to erect the bridge. At the same time, and coincident with the beginning of construction on the Harrisburg and Pittsburg railway at Harrisburg under its charter granted by the Pennsylvania legislature on April 13, 1846, Wheeling managed to secure a promise of the western terminal of the Baltimore and Ohio railway which after a long halt at Cumberland received a new charter from the Virginia legislature and prepared to push construction to the Ohio ahead of the Pennsylvania line.

The possible strategic and economic effects of the Baltimore and Ohio terminal at Wheeling increased the activity of Pittsburg against the bridge, which the engineer of the Pennsylvania and Ohio railway openly declared was designed as a connecting link between the Baltimore and Ohio and the state of Ohio by which Wheeling was also endeavoring

to make herself the terminal of the Ohio railway which Pittsburg sought to secure.

A determined struggle followed. Before its cables were thrown across the river, the Bridge Company received legal notice of the institution of a suit and an application for an injunction. The bill of Pennsylvania filed before the United States supreme court in July, 1849, charged that the Bridge Company under color of an act of the Virginia legislature, but in direct violation of its terms was preparing to construct a bridge at Wheeling which would obstruct navigation on the Ohio and thereby cut off and divert trade and business from the public works of Pennsylvania, and thus diminish tolls and revenues and render its improvements useless. In spite of the order of Judge Grier (August 1, 1849), the Bridge Company continued its work, and in August, 1849, Pennsylvania filed a supplemental bill praying for abatement of the iron cables which were being stretched across the river. The Bridge Company continued to work and completed the bridge. The state treasurer of Pennsylvania reported that it threatened to interfere with the business and enterprise of Pittsburg whose commercial prosperity was so essential to the productiveness of the main line of the Pennsylvania canal. In December, 1849, Pennsylvania filed another supplemental bill praying abatement of the bridge as a nuisance, representing that the structure obstructed the passage of steamboats and threatened to injure and destroy the shipbuilding business at Pittsburg. With no appeal to force (such as had recently occurred on the Ohio-Michigan frontier), or blustering enactments of state sovereignty, or threats of secession, she sought a remedy by injunction against a local corporation. In January, 1850, the Pennsylvania legislature unanimously passed a resolution approving the prosecution instituted by the attorney general. At the same time the Bridge Company secured from the Virginia legislature (on January 11, 1850) an amendatory act declaring that the height of the bridge (90 feet at eastern abutment, 93½ feet at the highest point and 62 feet at the western abutment above the low water level of the Ohio) was in conformity with the intent and meaning of the charter.

In the presentation of the case before the Supreme court, the attorney general of Pennsylvania and Edwin M. Stanton were attorneys for Pennsylvania and Alexander H. H. Stuart and Reverdy Johnson for the Bridge Company.

The counsel for Pennsylvania urged that the bridge had been erected especially to the injury of Pittsburg (the rival of Wheeling in commerce and manufacture) whose six largest boats (those most affected by the bridge) carried between Pittsburg and Cincinnati three-fourths of the trade and travel transported by the Pennsylvania canal. "To the public works of Pennsylvania the injury occasioned by this obstruction is deep and lasting," said Stanton, "The products of the South and West, and of the Pacific coast are brought in steamboats along the Ohio to the western end of her canals at Pittsburg, thence to be transported through them to Philadelphia, for an eastern and foreign market. Foreign merchandise and eastern manufactures, received at Philadelphia, are transported by the same channel to Pittsburg, thence to be carried south and

west, to their destination, in steamboats along the Ohio. If these vessels and their commerce are liable to be stopped within a short distance as they approach the canals, and subject to expense, delay and danger, to reach them, the same consequence to ensue on their voyage, departing, the value of these works must be destroyed."

The Bridge Company, through its counsel admitting that Pennsylvania had expended large amounts in public improvements terminating at Pittsburg and Beaver over which there was a large passenger and freight traffic, alleged the exclusive sovereignty of Virginia over the Ohio, submitted the act of the Virginia legislature authorizing the erection of the bridge, denied the corporate capacity of Pennsylvania to institute the suit, and justified the bridge as a connecting link of a great public highway as important as the Ohio and as a necessity recognized by reports of committees in Congress. It cited the example set by Pennsylvania in bridging the Allegheny, in authorizing a bridge across the Ohio below Pittsburg at thirteen feet less elevation than the Wheeling bridge, and in permitting the bridging and damming of the Monongahela by enterprising citizens of Pittsburg under charter from the state. It declared that the bridge was not an appreciable inconvenience to the average class of boats and would not diminish the Pittsburg trade, and suggested that the chimneys of steamboats should be shortened or put on hinges for convenience in lowering. It also contended that the bridge was necessary for transporting into the interior of the passengers as much of the freight which would be diverted from the streams by the greater speed and safety of railroads which would soon concentrate at Wheeling.

The court, accepting jurisdiction, appointed Hon. R. H. Walworth, a jurist of New York as special commissioner to take testimony and report. The report indicated that the bridge obstruction would divert part of the total traffic (nearly fifty millions annually), from lines of transportation centering at Pittsburg to the northern route through New York or to a more southern route. Of the nine regular packets which passed through Wheeling in 1847, five would have been unable to pass under the bridge (for periods differing in length) without lowering or cutting off their chimneys. The passage of three of the Pittsburg-Cincinnati packets had been actually stopped or obstructed. One on November 10, 1847, was detained for hours by the necessity of cutting off the chimneys. Another, the Hibernia on November 11, 1849 was detained thirty-two hours and was obliged to hire another boat to carry to Pittsburg the passengers except those who preferred to cross the mountains via Cumberland. Later, she was twice compelled to abandon a trip once hiring another boat, and once landing her passengers who proceeded east to Cumberland. Two accidents had also occurred.

The report indicated a preponderance of evidence against the safety of lowering the chimneys, which at any rate was regarded as a very slow and expensive process. Although the commissioner recognized that it would be a great injury to commerce and to the community to destroy fair competition between river and railroad transit by an unnecessary obstruction to either, and recognized the propriety of carry-

ing railroads across the large rivers if it could be done without impairing navigation, he concluded that the Wheeling bridge was an obstruction to free navigation of the Ohio. Of the 230 boats on the river below Wheeling, the seven boats of the Pittsburg-Cincinnati packet line were most obstructed by the bridge. They conveyed about one-half the goods (in value) and three-fouths of the passengers between the two cities. Since 1844, they had transported nearly a million passengers.

The Wheeling Bridge Company complained that Mr. Walworth had given the company no chance to present its testimony.

The decision of the court was given at the adjourned term in May, 1852. The majority of the court (six members) held that the erection of the bridge, so far as it interfered with the free and unobstructed navigation of the Ohio, was inconsistent with and in a violation of acts of Congress, and could not be protected by the legislation of Virginia because the Virginia statute was in conflict with the laws of Congress.

Justice McLean who delivered the opinion of the court, held that since the Ohio was a navigable stream subject to the commercial power of Congress, Virginia had no jurisdiction over the interstate commerce upon it, and that the act of the Virginia legislature authorizing the structure of the bridge so as to obstruct navigation could afford no justification to the Bridge Company. However numerous the railroads and however large their traffic, he expected the waterways to remain the great arteries of commerce and favored their protection as such instead of their obstruction and abandonment. He decided that the lowest parts of the bridges should be elevated not less than one hundred and eleven feet from the low water mark and maintained on a level headway for three hundred feet over the channel. The decree stated that unless the navigation was relieved from obstruction by February 1, 1853, by this or some other plan, the bridge must be abated,

Chief Justice Taney dissented on the ground that since Virginia had exercised sovereignty over the Ohio, and Congress had acquiesced in it, the court could not declare the bridge an unlawful obstruction and the law of Virginia unconstitutional and void. He preferred to leave the regulation of bridges and steamboat chimneys to the legislative department. Justice Daniels, also dissenting, declared that Pennsylvania could not be a party to the suit on the ground stated in the bill (diminution of profits in canal and other public improvements many miles remote from the Wheeling bridge) and that the court could take no jurisdiction in such cases if imperfect rights or of merely moral or incidental rights as distinguished from legal or equitable.

"And," said he, "if the mere rivalry of works of internal improvement in other states by holding out the temptation of greater dispatch, greater safety, or any other inducement to preference for those works over the Pennsylvania canals, be a wrong and a ground for jurisdiction here, the argument and the rule sought to be deduced therefrom should operate equally. The state of Virginia who is constructing a railroad from the seaboard to the Ohio river at Point Pleasant, much further down that river than either Pittsburg or Wheeling, and at the cost of the longest tunnel in the world, piercing the base of the Blue Ridge Mountains, should have the right by original suit in this court against that state herself, to recover compensation for diverting any portion of the commerce which might seek the ocean by the shortest transit to the mouths of her canals on the Ohio, or to the city of Pittsburg: and on the like principle, the state of Pennsylvania has a

just cause of action against the Baltimore and Ohio railroad for intercepting at Wheeling the commerce which might otherwise be constrained to seek the city of Pittsburg."

Justice Daniels, intoxicated with the recent effects of the development of railroads, directed considerable attention to the reigning fallacy which Pennsylvania urged upon the court—that commerce could be prosecuted with advantage to the western country only by the channels of rivers and through the agency of steam boats whose privileges were regarded as paramount. He urged that the historical progress of means of transportation exposed the folly and injustice of all attempts to restrict commerce to particular localities or to particular interests. Against the narrow policy of confining commerce to watercourses whose capacity was limited by the contribution of the clouds, he urged the superiority of railroads for speed, safety, freedom from dependence on wind or depth of water, and unifying power in interfluvial regions.

Plans were proposed by the defendant's counsel to remove the obstruction to navigation at less expense than the elevation or abatement of the bridge, and the court March 3, 1852 referred the plans to J. McAlpine who made a report on May 8, 1852. The majority of the court, looking only to desired results and not methods, then agreed that the former decree would permit the Bridge Company to remove the obstruction by a two hundred foot draw in the bridge over the western branch of the river. Justice McLean then delivered the opinion of the court in which he stated that the right of navigating the Ohio or any other river does not necessarily conflict with the right of bridging it; but he declared that these rights could only be maintained when they were exercised so as not to be incompatible with each other. If the bridge had been constructed according to the language of the charter, he said, the suit could not have been instituted.

Defeated before the courts, Wheeling took prompt steps to save the bridge by action of Congress. In her efforts she received the cooperation of one hundred and twenty-one members of the Ohio legislature who (in April 1852) petitioned Congress to protect the bridge by maintaining it as a mail route, and also by resolutions of the Virginia and Indiana legislatures. She even had the sympathy of thirty-six members representing the minority of the Pennsylvania legislature, who presented a petition in favor of protecting the bridge. On July 8th, the committee on roads made a favorable report asking Congress to declare both bridges to be post-roads and military roads and to regulate the height and construction of chimneys of steamboats navigating the Ohio. On August 13th, an adverse report was made on a resolution of the Pennsylvania legislature. In the debates which followed (from August 13th to August 18th) the advocates of the bill included: (1) Those who felt that the entire proceeding against the bridge originated in Pittsburg's jealousy of Wheeling, (2) those who felt that the recent decision of the supreme coure was a strike against state sovereignty, and (3) those who (favoring the encouragement of better facilities for travel) asserted that within two years one could travel from New York to Cincinnati via Wheeling bridge as quickly as one could now pass

from Cincinnati to Wheeling in either of the seven tall-chimneyed Pittsburg packet boats and with no danger of stoppage of transportation alternately by low water and frozen water.

Some of those who oposed the bill regarded the proposed legislation in favor of the bridge as giving a preference to boats bound to Wheeling over those bound to Pittsburg and as a strike at the prosperity of Pittsburg. Others in opposition directed attention to the fact that bridges adapted to railroad purposes could be erected near Wheeling without obstruction to navigation, and that the Ohio Central railway and the Baltimore and Ohio which had recently intended to connect at Wheeling had found a more convenient point four miles south at Boggs' Ferry where a bridge could be constructed at sufficient height to avoid the objection taken by the Supreme court to the bridge at Wheeling.

The bill passed the Senate on August 28 by a vote of 33 to 10, and the House on August 30 by a vote of 92 to 42. On August 31, before the time designated for the execution of the decree of May 1852, it became an act of Congress legalizing in their existing conditions the bridges both at the west and the east branch, abutting on Zane's Island. It declared them to be post roads for the passage of the United States mail, at the same time requiring the vessels navigating the river to regulate their pipes and chimneys so as not to interfere with the elevation and construction of the bridges.

The Bridge Company relied upon this act as superseding the effect and operation of the decree of May 1852; but Pennsylvania insisted that the act was unconstitutional. The captain of one of the Pittsburg packets showed his displeasure by unnecessarily going through the form of lowering his chimney and passing under the bridge with all the forms of detention and oppression.

Meantime, the rival railroads had been pushing westward to connect the rival cities of the Ohio with rival cities of the East. The original line of the Pennsylvania whose construction began at Harrisburg in July, 1847, was opened to the junction with the Allegheny Portage railway at Hollidaysburg at the base of the mountains on September 16, 1850. The Baltimore and Ohio, notwithstanding delays incident to the difficulties experienced in securing laborers was opened for business from Cumberland to the foot of the mountains at Piedmont on July 5, 1851. The western division of the Pennsylvania line from the western end of the Portage railroad at Johnstown to Pittsburg was opened on September 22, 1852 and a through train service via the inclined planes of the Portage railway was established on December 10, following.

By the beginning of 1853, Wheeling seemed to have won new advantages over Pittsburg through the strategy of prospective railway lines and new steamer lines which induced the belief that Pennsylvania with her foot on the Ohio was but at the threshold of the promised land. The B. & O. won the race to the Ohio by a single continuous track over which through train service was established from Baltimore to Wheeling in January 1853.

On January 12, at a great opening celebration of the marriage of East and West, the city of Wheeling provided an elaborate banquet

for nearly one thousand guests who listened to many regular and irregular toasts of rejoicing, and to whom was dedicated a poem closing with these lines:

> *"Poor Pittsburg is flung—for her steamboats no more
> Can whistle, in scorn, as they pass Wheeling's shore
> No chimneys to lower—no action to bring—
> For a flat-boat she'll find, will soon be the thing;
> She may war on all bridges—save one, for herself,
> But her trade on the river is laid on the shelf."

To connect with the new railroad at Wheeling, the Wheeling and Kanawha packet line was established by the Virginia legislature and the Union line of steamboats was established between Wheeling and Louisville. At the same time, steps had been taken to construct several other prospective railways which would naturally converge at Wheeling. These included the Hempfield to connect with Philadelphia, a line from Columbus, a line from Marietta, and also a line from Cleveland which was expected to become an important point in case the proposed treaty of reciprocity with Canada should become a law. While the James River and Kanawha canal and the Covington and Ohio railway still hesitated to find a way westward across the mountains farther south, and before the construction of the Northwestern Virginia railroad from Grafton to Parkersburg, Wheeling especially expected to divert the trade of southern Ohio, Kentucky and Tennessee and to center it at Wheeling. Wheeling was also favored by cheaper steamer rates to the west and by the dangers of navigation between Wheeling and Pittsburg at certain periods of the year. Early in 1854 New York merchants shipped western freight via Baltimore and Wheeling. Oysters, too, because of the bad condition of the Pennsylvania line of travel were shipped via Wheeling to Cleveland and Chicago.

Undaunted by the chagrin of defeat, and with undiminished confidence in her ability to maintain her hegemony of the upper Ohio and the West, Pittsburg prepared to marshal and drill her forces for final victory by efforts to regain ground lost and to forestall the plans of her rival by new strategic movements. She declared that Wheeling was outside the travel line. She stationed an agent at Graves' Creek below Wheeling to induce eastward bound boat passengers to continue their journey to Pittsburg and thence eastward via the Pennsylvania line of travel in order to avoid the tunnels and zigzags and various kinds of delays on the B. & O.—to which the *Wheeling Intelligencer* replied by uncomplimentary references to the slowness of travel over the inclined planes and flat rails of the Pennsylvania Central railway. Through her mayor and her newspapers she warned travelers against the danger of accidents on the B. & O.—to which Wheeling replied that the frightful accidents on the Pennsylvania line hurled more people into eternity each month than had ever been injured on the B. & O. She also endeavored to prejudice travelers against the Union lines of steamers, complaining of its fares and food and also of the reckless racing encouraged by its captains who had bantered the boats of other lines for exhibitions of speed. She was also accused of using her influence to secure the location of the route of the Pittsburg branch of the Cleve-

land road on the west shore of the Ohio from Wellsville to Wheeling, causing Brooke and Hancock counties to threaten secession from Virginia.

As a strategic movement against the proposed Hempfield road by which Wheeling hoped to get not only direct connection with Philadelphia, but also a connection with the Marietta road, Pittsburg resuscitated a movement in favor of the Steubenville and Pittsburg railway and revived the project of the Connelsville route to Baltimore. She also strained every nerve to open connection with the New York and Erie line via the Allegheny valley.

The proposed Steubenville and Pittsburg railway, especially was strongly opposed by Wheeling by whom it was regarded as a project to cripple her by diverting her trade. Largely through her influence, Pittsburg's attempt to secure a charter from the Virginia legislature for the road for which she proposed a bonus on every passenger, was defeated in the lower house by a vote of 70 to 37, and later failed to secure the approval of the house committee. When the promoters of the road tried the new plan of getting a route by securing the land in fee with the idea of rushing the road through in order to get the next Congress to declare it a post road, the *Wheeling Intelligencer* declared that Congress would not dare thus to usurp the sovereignty of Virginia. An injunction against the road was proposed, and in order to prevent the construction of the railway bridge at Steubenville, a plan to construct a road from the state line through Holliday's Cove and Wellsburg was considered.

From the consideration of plans to prevent the construction of the Steubenville bridge above her, Wheeling turned to grapple with a more immediate danger of ruin which threatened her by a proposed connection of the B. & O. and the Central Ohio railroad at Benwood, four miles below her. This she claimed was in violation of the law of 1847, granting a charter to the B. & O., and to prevent it she secured an injunction from Judge George W. Thompson of the circuit court—causing the *State Journal* of Columbus to place her in the list with Erie, Penna. (which had recently attempted to interrupt travel between east and west), and to assert that the Benwood track case was similar to the Wheeling bridge case. An attempt was made to secure combination and co-operation of the railroads to erect a union bridge in Wheeling to replace the old structure.

Meantime, transportation facilities improved on the Pennsylvania line after the mountains were conquered by a grade for locomotives. The mountain division of the road, and with it the whole line, was opened on February 15, 1854 and by the cheaper rates soon overcame the advantages which New Orleans had held in attracting the commerce of the West. Pennsylvania promptly passed a bill (1854) authorizing the sale of her unproductive public works, and abandoned her portage railway across the mountains. Three years later (1857) she sold to the Pennsylvania railway the main line of the system of public works undertaken in 1826, including the Philadelphia and Columbia railway.

Coincident with the determination of Pennsylvania to dispose of her

unproductive public works, the old Wheeling bridge over the main branch of the stream was blown down by a gale of wind (in May 1854) and was promptly removed to avoid obstruction. Some regarded the disaster as a just judgment for trespass upon the rights of others by Wheeling in order to make herself the head of navigation. The *Pittsburg Journal* edited by the ex-mayor of the city, gloated over Wheeling's misfortune. The Pittsburg and Cincinnati packet "Pennsylvania" in derision lowered her chimneys at the place recently spanned by the bridge. Her second offense a few days later exasperated the indignant crowd on shore and induced the boys to resort to mob spirit and to throw stones resulting in a hasty departure of the vessel, but further trouble was avoided by an apology from the captain and the wise advice of older heads.

Another and a final Wheeling Bridge case before the Supreme court (arising in 1854 and decided in April 1866) resulted from the decision of the company to rebuild the bridge. When the company promptly began the preparations for rebuilding, Pennsylvania, stating that she desired to secure a suspension of expensive work until the force and effect of the act of Congress could be judicially determined, asked the United States supreme court for an injunction against the reconstruction of the bridge unless in conformity with the requirements of the previous decree in the case. Without any appearance or formal opposition of the company, the injunction was granted (June 25, 1854) during vacation of the court, by Justice Grier, whom the Wheeling *Intelligencer* called the Pittsburg judge of the supreme court. The *Intelligencer* regarded the question as a grave one involving the sovereign authority of Virginia and a direct law of Congress, and illustrating the aggressions of the supreme court which it feared were becoming daily more alarming. Charles Ellet, the engineer on whom the injunction was served, promptly announced that he expected to have the bridge open for traffic in two weeks, and the Bridge Company asked Congress to investigate charges against Judge Grier to the effect that he had invited bribery. The new suspension bridge was opened as a temporary structure on July 26th at an expense of only $8,000.

The injunction having been disregarded, Pennsylvania asked for attachment and sequestration of the property of the company for contempt resulting from disobelience of the injunction of Justice Grier. At the same time, the company asked the court to dissolve the injunction. Pennsylvania insisted that the act of Congress was unconstitutional and void because it annuled the judgment of the court already rendered and because it was inconsistent with the clause in Article 1, Section 9, of the Constitution against preference to the ports of one state over those of another.

Justice Nelson in delivering the decision of the court on the latter point said, "It is urged that the interruption of the navigation of the steamboats engaged in commerce and conveyance of passengers upon the Ohio river at Wheeling from the erection of the bridge, and the delay and expense arising therefrom, virtually operate to give a preference to this port over that of Pittsburg; that the vessels to and from Pittsburg navigating the Ohio and Mississippi rivers are not only subjected to this delay and expense in the course of the voyage, but that the obstruction will necessarily have the effect to stop the trade and business at Wheel-

ing, or divert the same in some other direction or channel of commerce. Conceding all this to be true, a majority of the court are of the opinion that the act of Congress is not inconsistent with the clause in the constitution referred to—in other words, that it is not giving a preference to the ports of one state over those of another, within the true meaning of that provision. There are many acts of Congress passed in the exercise of this power to regulate commerce, providing for a special advantage to the port or ports of one state (and which every advantage may incidentally operate to the prejudice of the ports in a neighboring state) which have never been supposed to conflict with this limitation upon its power. The improvement of rivers and harbors, the erection of light houses, and other facilities of commerce, may be referred to as examples."

The court decided that the decree for alteration or abatement of the bridge could not be carried into execution since the act of Congress regulating the navigation of the river was consistent with the existence and continuance of the bridge—but that the decrees directing the costs to be paid by the Bridge Company must be executed. The majority of the court (six members) on the grounds that the act of Congress afforded full authority to reconstruct the bridge, directed that the motion for attachment against the President of the Bridge Company and others for disobedience and contempt should be denied and the injunction dissolved, but Nelson agreed with Wayne, Grier and Curtis in the opinion that an attachment should issue since there was no power in Congress to interfere with the judgment of the court under the pretense of power to legalize the structure by making it a post road.

Justice McLean dissented, feeling that the principle involved was of the deepest interest to the growing commerce of the West which might be obstructed by bridges across the river. He opposed the idea that making the bridge a post road (under the purpose of the act of July 7, 1838), could exempt it from the consequences of being a nuisance. He regarded the act of Congress as unconstitutional and void; and, although he admitted the act might excuse previous contempt, he declared that it could afford no excuse for further refusal to perform the decree.

A sequel to the preceding case arose in the same term of court (December 1855) on motion of the Counsel for the Bridge Company for leave to file a bill of review of the court's order of December term of 1851, in regard to the costs. The court had already determined that the decree rendered for costs against the Bridge Company was unaffected by the act of Congress of August 1, 1852; but the court declining to open the question for examination, declared "There must be an end of all litigation."

The later history bearing upon the subject here treated, the regulation of the construction of bridges across the Ohio under acts of Congress, the opposition of both Wheeling and Pittsburg to the construction of bridges such as railroad bridges at Parkersburg and between Benwood and Bellaire (which were completed in 1871), the decline of old local jealousies and prejudices, the rise of new problems of transportation resulting from the extension of railways, cannot be considered within the scope and limits of this article.

Appendix B., Social Statistics

I. POPULATION OF WESTERN VIRGINIA BY COLOR AND CONDITION, 1860.

Formed.	County.	WHITE.			FREE COLORED.						Total Free Colored.	Free Total	SLAVE.						Total Slave.	Aggregate.
					Black.			Mulatto.					Black.			Mulatto.				
		M.	F.	Total.	M.	F.	Total.	M.	F.	Total.			M.	F.	Total.	M.	F.	Total.		
1754	Hampshire	6,344	6,134	12,478	40	31	71	69	82	151	222	12,700	440	431	871	155	187	342	1,213	13,913
1772	Berkeley	5,299	5,290	10,589	90	104	194	44	48	92	286	10,875	649	701	1,350	117	183	300	1,650	12,525
1776	Monongalia	6,385	6,516	12,901	5	4	9	21	16	37	46	12,947	30	50	80	12	9	21	101	13,048
1776	Ohio	10,990	11,206	22,196	20	32	52	39	35	74	126	22,322	27	42	69	15	16	31	100	22,422
1777	Greenbrier	5,509	4,991	10,500	59	29	88	58	40	98	186	10,686	598	544	1,142	185	198	383	1,525	12,211
1784	Harrison	6,671	6,505	13,176	5	9	14	6	12	18	32	13,208	162	217	397	97	106	203	582	13,790
1786	Hardy	4,304	4,217	8,521	15	23	38	122	110	232	270	8,791	463	413	876	84	113	197	1,073	9,864
1787	Randolph	2,498	2,295	4,793	5	4	9	2	3	5	14	4,807	67	72	139	21	23	44	183	4,990
1788	Pendleton	2,957	2,913	5,870	8	19	27	12	11	23	50	5,920	92	88	180	27	37	64	244	6,164
1789	Kanawha	7,084	6,701	13,785	49	44	93	42	46	88	181	13,966	905	650	1,555	329	300	629	2,184	16,150
1797	Brooke	2,707	2,718	5,425	8	6	14	16	21	37	51	5,476	4	7	11	2	5	7	18	5,494
1799	Wood	5,624	5,167	10,791	15	22	37	21	21	42	79	10,870	49	54	103	36	37	73	176	11,046
1799	Monroe	4,826	4,710	9,536	19	24	43	25	39	64	107	9,643	460	394	854	113	147	260	1,114	10,757
1801	Jefferson	5,061	5,003	10,064	138	167	305	98	108	206	511	10,575	1,826	1,629	3,455	233	282	505	3,960	14,535
1804	Mason	4,556	4,194	8,750	15	6	21	11	15	26	47	8,797	119	165	284	40	52	92	376	9,173
1809	Cabell	3,901	3,790	7,691	7	12	19	2	3	5	24	7,715	94	120	214	43	48	91	305	8,020
1814	Tyler	3,334	3,154	6,488	...	1	1	4	6	10	11	6,499	6	9	15	1	2	3	18	6,517
1816	Lewis	3,977	3,759	7,736	5	6	11	14	8	22	33	7,769	62	83	145	32	53	85	230	7,999
1818	Nicholas	2,349	2,122	4,471	2	...	2	...	...	...	2	4,473	50	52	102	32	20	52	154	4,627
1818	Preston	6,789	6,413	13,200	4	...	4	24	17	41	45	13,245	29	33	62	2	3	5	67	13,312
1820	Morgan	1,847	1,767	3,614	7	5	12	3	9	12	24	3,638	28	29	57	18	19	37	94	3,732
1821	Pocahontas	1,887	1,799	3,686	8	2	10	6	4	10	20	3,706	119	92	211	18	23	41	252	3,958
1824	Logan	2,501	2,288	4,789	...	1	1	...	...	...	1	4,790	48	38	86	37	25	62	148	4,938
1831	Jackson	4,237	4,003	8,240	6	...	6	4	1	5	11	8,251	16	28	44	7	4	11	55	8,306
1831	Fayette	2,995	2,721	5,716	...	...	...	4	6	10	10	5,726	98	97	195	35	41	76	271	5,997
1835	Marshall	6,641	6,270	12,911	6	10	16	15	26	41	57	12,968	15	14	29	.....	.....	.....	29	12,997
1836	Braxton	2,533	2,352	4,885	1	...	1	2	...	2	3	4,888	27	32	59	23	22	45	104	4,992
1837	Mercer	3,315	3,113	6,428	3	1	4	12	13	25	29	6,457	151	129	280	31	51	82	362	6,819

1842	Marion	6,350	6,306	12,656	1	2	3	...	...	...	3	12,659	20	25	45	8	10	18	63	12,722
1842	Wayne	3,521	3,083	6,604	...	...	...	...	...	...	...	6,604	42	67	109	16	18	34	143	6,747
1843	Barbour	4,454	4,274	8,728	1	...	1	73	61	134	135	8,863	37	50	87	4	4	8	95	8,958
1843	Ritchie	3,528	3,281	6,089	...	...	...	...	...	...	...	6,809	11	19	30	2	6	8	38	6,847
1844	Taylor	3,717	3,583	7,300	8	5	13	23	15	38	51	7,351	41	52	93	6	13	19	112	7,463
1845	Doddridge	2,641	2,527	5,168	1	...	1	...	...	...	1	5,169	5	18	23	5	6	11	34	5,203
1845	Gilmer	1,858	1,827	3,685	...	...	...	10	12	22	22	3,707	20	21	41	5	6	11	52	3,759
1846	Wetzel	3,408	3,283	6,691	1	...	1	...	1	1	2	6,693	3	4	7	...	3	3	10	6,703
1847	Boone	2,448	2,233	4,681	...	1	1	...	...	...	1	4,682	40	53	93	29	36	65	158	4,840
1848	Putnam	2,875	2,833	5,708	...	4	4	5	4	9	13	5,721	181	193	374	100	106	206	580	6,301
1848	Wirt	1,921	1,807	3,728	...	...	...	...	...	...	...	3,728	8	14	22	1	...	1	23	3,751
1848	Hancock	2,253	2,189	4,442	...	1	1	...	...	..	1	4,443	...	2	2	...	...	...	2	4,445
1850	Raleigh	1,672	1,619	3,291	...	1	1	13	5	18	19	3,310	23	26	49	5	3	8	57	3,367
1850	Wyoming	1,446	1,349	2,795	..	...	..	1	1	2	2	2,797	22	22	44	13	7	20	64	2,861
1851	Pleasants	1,503	1,422	2,925	1	1	2	2	1	3	5	2,930	7	6	13	1	1	2	15	2,945
1851	Upshur	3,637	3,427	7,064	6	4	10	3	3	6	16	7,080	80	76	156	23	23	56	212	7,292
1855	Calhoun	1,323	1,169	2,492	...	...	...	...	1	1	1	2,493	1	2	3	5	1	6	9	2,502
1856	Clay	924	837	1,761	...	...	...	3	2	5	5	1,766	4	10	14	6	1	7	21	1,787
1856	Roane	2,722	2,585	5,307	...	1	1	...	1	1	2	5,309	21	29	50	13	9	22	72	5,381
1856	Tucker	718	674	1,392	...	...	...	8	8	16	16	1,408	6	6	12	4	4	8	20	1,428
1858	McDowell	774	761	1,535	...	...	...	...	...	...	...	1,535	...	...	...	...	...	...	...	1,535
1860	Webster	833	719	1,552	...	...	...	...	...	...	...	1,552	1	2	3	...	...	...	3	1,555
1866	Mineral	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1866	Grant	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1867	Lincoln	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1871	Summers	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1895	Mingo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

2. NATIVE AND FOREIGN POPULATION OF WEST VIRGINIA, 1870.

Formed	County.	NATIVE BORN.							FOREIGN BORN.												SUMMARY.		
		Born in Va. and W. Va.	Pennsylvania.	Ohio.	Maryland.	Kentucky.	New York.	Total.	Total.	British Am.	England and Wales.	Ireland.	Scotland.	Germany.	France.	Norway & Sweden.	Switzerland.	Holland.	Austria.	Italy.	Native.	Foreign.	Total.
1754	Hampshire ...	7,143	140	19	223	4	2	7,568	75	..	.. 2	.. 35	1	36	1	..	..	...	..	..	7,568	75	7,643
1772	Berkeley	11,901	807	54	1,160	4	87	14,261	639	6	34	323	4	252	5	..	5	...	4	..	14,261	639	14,900
1776	Monongalia ..	11,731	1,390	61	178	8	16	13,455	92	..	37	29	6	16	3	..	..	...	..	..	13,455	92	13,547
1776	Ohio	18,423	1,884	1,409	513	51	155	22,811	6,020	25	524	1,594	78	3,485	63	..	55	151	9	..	22,811	6,020	28,831
1777	Greenbrier ...	10,945	23	24	35	32	12	11,178	239	..	19	179	2	8	23	1	1	...	1	1	11,178	239	11,417
1784	Harrison	15,559	318	85	165	10	39	16,292	42[illegible]	10	30	300	35	24	1	..	19	...	..	..	16,292	422	16,714
1786	Hardy	5,299	32	46	57	9	2	5,477	41	..	2	2	3	29	..	..	5	...	..	..	5,477	41	5,518
1787	Randolph	5,262	38	43	33	7	7	5,426	137	..	1	113	1	3	..	..	19	...	..	..	5,426	137	5,563
1788	Pendleton	6,429	4	3	9	...	...	6,449	6	..	...	4	...	1	..	..	1	...	..	..	6,449	6	6,455
1789	Kanawha	20,393	211	396	52	166	91	21,662	687	14	144	228	67	183	8	1	15	...	..	20	21,662	687	22,349
1797	Brooke	3,744	612	505	85	16	16	5,066	398	4	61	199	20	106	3	..	3	...	..	..	5,066	398	5,464
1799	Wood	13,537	1,223	1,812	331	103	235	17,713	1,287	30	98	600	57	428	18	2	40	3	4	..	17,713	1,287	19,000
1799	Monroe	10,899	8	30	14	4	3	11,022	102	..	15	76	6	4	..	..	..	...	..	1	11,022	102	11,124
1801	Jefferson	11,402	429	32	903	27	23	12,958	261	..	37	153	7	54	5	1	1	2	..	..	12,958	261	13,219
1804	Mason	12,687	470	1,485	37	75	77	15,025	953	7	466	194	63	207	7	..	2	...	..	..	15,025	953	15,978
1809	Cabell	5,504	67	344	19	143	41	6,260	169	4	24	59	1	54	10	..	8	2	7	..	6,260	169	6,429
1814	Tyler	6,215	612	730	78	8	23	7,724	108	1	7	50	4	29	5	..	12	...	..	..	7,724	108	7,832
1816	Lewis	9,342	87	40	98	4	25	9,653	52[illegible]	6	43	369	11	75	4	..	1	1	..	1	9,653	522	10,175
1818	Nicholas	4,390	1	6	.....	3	1	4,415	43	6	1	29	3	2	..	..	..	...	..	2	4,415	43	4,458
1818	Preston	12,234	726	67	675	9	21	13,838	717	7	115	266	152	166	5	..	1	...	3	..	13,838	717	14,555
1820	Morgan	3,727	81	5	319	1	28	4,208	107	9	3	24	1	64	..	..	4	...	..	..	4,208	107	4,315
1821	Pocahontas ...	4,011	2	1	3	6	1	4,035	34	1	...	21	...	3	..	..	..	9	..	..	4,035	34	4,069
1824	Logan	4,789	2	12	.....	262	1	5,117	7	..	...	.....	2	2	1	..	..	...	..	..	5,117	7	5,124
1831	Jackson	8,737	326	848	51	47	75	10,177	123	1	29	31	12	27	20	..	2	...	..	1	10,177	123	10,300
1831	Fayette	6,459	10	46	6	17	19	6,615	32	2	1	24	2	3	..	..	..	...	.	..	6,615	32	6,647
1835	Marshall	10,726	1,707	921	273	18	65	14,032	909	36	99	370	36	342	10	..	4	2	2	2	14,032	909	14,941
1836	Braxton	6,380	12	7	17	3	1	6,430	50	..	...	23	2	24	..	..	1	...	..	..	6,430	50	6,480
1837	Mercer	6,921	8	9	6	5	4	7,047	17	..	9	6	...	1	..	..	..	...	..	..	7,047	17	7,064
1842	Marion	11,104	476	53	154	6	12	11,917	190	4	24	124	21	16	..	..	..	1	..	..	11,917	190	12,107
1842	Wayne	6,881	47	125	4	668	5	7,824	28	5	6	9	2	6	..	..	..	...	..	..	7,824	28	7,852

1843	Barbour	9,958	97	35	98	4	7	10,231	81	3	1	61	1	11	1	..	..	...	..	3	10,231	81	10,312
1843	Ritchie	7,804	367	269	140	12	29	8,747	308	6	27	212	24	33	1	..	4	...	..	..	8,747	308	9,055
1844	Taylor	8,052	277	77	332	3	35	8,883	484	4	25	287	13	124	15	1	1	...	7	..	8,883	484	9,367
1845	Doddridge	6,363	164	103	133	3	7	6,831	245	4	3	133	...	61	1	..	19	1	22	..	6,831	245	7,076
1845	Gilmer	4,272	7	6	16	3	3	4,313	25	..	13	.....	...	12	..	..	..	...	..	..	4,313	25	4,338
1846	Wetzel	6,482	893	705	100	10	16	8,281	314	1	33	104	...	91	3	..	82	...	..	..	8,281	314	8,595
1847	Boone	4,372	9	17	5	25	13	4,502	51	1	7	35	6	1	..	..	..	...	..	..	4,502	51	4,553
1848	Putnam	7,021	222	279	10	35	16	7,655	139	[illegible]	49	59	5	10	5	..	1	...	..	..	7,655	139	7,794
1848	Wirt	3,887	295	283	49	21	40	4,733	71	3	18	21	1	24	3	..	1	...	..	..	4,733	71	4,804
1848	Hancock	2,651	868	504	43	3	15	4,132	231	3	63	131	18	15	1	..	..	...	..	..	4,132	231	4,363
1850	Raleigh	3,633	4	2	1	...	...	3,655	18	..	...	18	...	.....	..	..	..	...	..	..	3,655	18	3,673
1850	Wyoming	2,964	3	9	.....	35	...	3,168	3	..	...	3	...	.....	..	..	..	...	..	..	3,168	3	3,171
1851	Pleasants	2,427	194	282	34	6	4	2,968	44	..	12	8	3	18	..	..	3	...	..	..	2,968	44	3,012
1851	Upshur	7,714	79	11	20	16	16	7,938	85	1	11	64	1	8	..	..	..	...	..	..	7,938	85	8,023
1855	Calhoun	2,804	37	31	23	13	1	2,926	13	..	1	2	...	10	..	..	..	...	..	..	2,926	13	2,939
1856	Clay	2,148	1	7	.....	24	2	2,196	.....	..	...	.....	...	.....	..	..	..	...	..	..	2,196	.....	2,196
1856	Roane	7,016	29	56	7	60	1	7,220	12	1	...	3	...	18	..	..	3	...	..	..	7,220	12	7,232
1856	Tucker.....	1,851	5	.....	20	...	2	1,887	20	..	...	3	8	8	..	..	..	1	..	..	1,887	20	1,907
1866	Grant.....	1,662	1	4	.....	172	27	1,949	[illegible]	..	...	1	...	.....	..	..	..	...	..	..	1,949	3	1,952
1858	McDowell.....	1,708	1	.....	.....	12	...	1,726	4	..	...	4	...	.....	..	..	..	...	..	..	1,726	4	1,730
1860	Webster.....	4,899	152	32	741	1	17	5,906	426	..	32	245	63	72	1	..	8	...	..	2	5,906	426	6,332
1866	Mineral.....	4,268	18	9	51	...	18	4,382	85	1	1	2	2	71	..	..	7	1	..	..	4,382	85	4,467
1867	Lincoln.....	4,576	21	225	2	114	3	5,039	14	..	5	2	2	5	..	..	..	...	..	..	5,039	14	5,053
1871	Summers	.....	.....	.....	.....	...	...	.....	.....	..	...	.....	...	.....	..	..	..	...	..	..	.....	.....	.....
1895	Mingo	.....	.....	.....	.....	...	...	.....	.....	..	...	.....	...	.....	..	..	..	...	..	..	.....	.....	.....

3. NATIVITY AND FOREIGN PARENTAGE.

Counties	1860		1870					
	Native born	Foreign born	Native born	Foreign born	One or both parents foreign	Father foreign	Mother foreign	Father and mother foreign
Totals	360,143	16,545	424,923	17,091	46,204	43,917	39,077	36,790
Hampshire	13,462	451	7,568	75	256	229	178	146
Berkeley	11,895	630	14,261	639	1,764	1,712	1,466	1,414
Monongalia	12,888	160	13,455	92	432	381	221	170
Ohio	16,911	5,511	22,811	6,020	15,802	15,187	14,624	14,009
Greenbrier	11,720	491	11,178	239	628	609	452	433
Harrison	13,489	301	16,292	422	1,091	1,060	918	887
Hardy	9,728	136	5,477	41	129	110	80	61
Randolph	4,890	100	5,426	137	391	391	326	326
Pendleton	6,159	5	6,449	6	29	22	16	9
Kanawha	15,778	372	21,662	687	1,492	1,420	1,233	1.161
Brooke	5,044	450	5,066	398	1,044	990	855	801
Wood	10,338	708	17,713	1,287	3,314	3,151	2,868	2,705
Monroe	10,670	87	11,022	102	313	294	210	191
Jefferson	14,174	361	12,958	261	771	743	548	520
Mason	7,974	1,199	15,025	953	2,188	2,125	1,929	1.866
Cabell	7,863	157	6,260	169	466	442	333	309
Tyler	6,409	110	7,724	108	372	321	242	191
Lewis	7,450	549	9,652	522	1,652	1,587	1,397	1,332
Nicholas	4,551	76	4,415	43	106	94	66	54
Preston	12,542	770	13,838	717	1,727	1,643	1,522	1,438
Morgan	3,647	85	4,208	107	326	311	220	205
Pocahontas	3,889	69	4,035	34	108	95	74	61
Logan	4,925	13	5,117	7	16	9	13	6
Jackson	8,119	187	10,177	123	430	372	272	214
Fayette	5,968	29	6,615	32	115	105	84	74
Marshall	12,040	957	14,032	909	2,759	2,528	2,295	2,064
Braxton	4,925	67	6,430	50	126	123	88	85
Mercer	6,787	32	7,047	17	55	54	32	31
Marion	12,414	308	11,917	190	544	525	418	399
Wayne	6,720	27	7,824	28	68	63	52	47
Barbour	8,857	101	10,231	81	257	229	203	175
Ritchie	6,589	258	8,747	308	886	857	705	676
Taylor	7,072	391	8,883	484	1,178	1,128	983	933
Doddridge	4,030	273	6,831	245	738	721	619	602
Gilmer	3,714	45	4,313	25	80	78	48	46
Wetzel	6,449	254	8,281	314	930	844	758	672
Boone	4,697	143	4,502	51	159	156	92	89
Putnam	6,231	70	7,655	139	353	328	276	251
Wert	3,730	21	4,733	71	220	196	146	122
Hancock	4,109	336	4,132	231	841	713	626	498
Raleigh	3,357	10	3,655	18	46	46	39	39
Wyoming	2,860	1	3,168	3	10	10	9	9
Pleasants	2,890	55	2,968	44	151	142	111	102
Upshur	7,182	108	7,938	85	229	221	184	176
Calhoun	2,486	16	2,926	13	45	38	26	19
Clay	1,787	.....	2,196	.....	.....	.....	.....	.....
Roane	5,355	26	7,220	12	52	52	17	17
Tucker	1,394	34	1,887	20	56	50	46	40
McDowell	1,531	4	1,949	3	3	3	3	3
Webster	1,554	1	1,726	4	25	24	10	9
Mineral	.....	.....	5,906	426	1,108	1,078	952	922
Grant	.....	.....	4,382	85	260	244	179	163
Lincoln	.....	.....	5,039	14	63	63	18	18

4. POPULATION OF TOWNS, 1850-1870.

FORMED	COUNTY.	TOWN.	1850	1860	1870
1754	Hampshire.	Romney	.....	569	482
1772	Berkeley	Martinsburg (with tp.)	2,190	3,364	4,863
1776	Monongalia	Morgantown	.....	741	797
1776	Ohio	West Liberty	219	280	251
		Clinton	213	.....	257
		So. Wheeling	1,071	2,630	3,158
		Triadelphia	242	258	239
		Fulton	266	311	333
		*Wheeling	11,435	14,083	19,280
1777	Greenbrier	Lewisburg (with tp.)	.....	969	887
1784	Harrison	Clarksburg	.....	895	.....
1789	Kanawha	Charleston	1,050	1,520	3,162
1799	Wood	Claysville	.....	114	123
		Parkersburg	1,218	2,493	5,546
		Williamstown	.....	209	282
1799	Monroe	Union	377	†290	419
1801	Jefferson	Smithfield	444	.....	361
		Bolivar	1,054	1,130	.....
		Charlestown	1,507	1,376	1,593
		Harper's Ferry	1,747	1,339	.....
		Shepherdstow	1,561	1,219	1,389
1804	Mason	Hartford	.....	915	918
		New Haven	.....	.....	489
		Point Pleasant	.....	519	773
		Clifton	.....	.....	693
		Mason	.....	1,016	1,182
		West Columbia	.....	714	778
1809	Cabell	Barboursville	.....	341	371
		Guyandotte	.....	538	427
1814	Tyler	Middlebourne	.....	247	182
		Sistersville	.....	351	364
1816	Lewis	Weston	.....	820	1,111
1818	Preston	Brandonville	.....	165	100
1820	Morgan	Bath (Berkeley Springs)	277	298	407
1824	Logan	Aracoma	.....	104	43
1831	Jackson	Ravenswood	.....	.....	362
		Ripley	.....	.....	226
1835	Marshall	Elizabethtown	496	571	**
		Moundsville	445	515	1,500
1842	Marion	Barracksville	.....	91	114
		Fairmont	683	704	621
		Johnton	.....	55	55
		Boothsville	.....	95	125
		Farmington	.....	89	85
		Worthington	.....	120	127
		Mannington	.....	241	411
		Palatine	.....	452	558
		Barnettville	.....	.....	54
		Fairview	.....	69	72
		Rivesville	.....	54	63
		Houltown	.....	46	33
		Newport	.....	72	68
		Winfield	.....	63	47
1843	Ritchie	Harrisville	.....	.....	140
1844	Taylor	Grafton	.....	891	1,987
1845	Gilmer	Glenville	.....	398	174
		Stumptown	.....	100	.....
1846	Wetzel	New Martinsville	228	.....	260
1848	Putnam	Buffalo	.....	268	321
1851	Upshur	Buckhannon	.....	427	475
1855	Calhoun	Arnoldsburg	.....	39	22
1856	Roane	Spencer	.....	196	143
1866	Mineral	Piedmont	.....	.....	1,366

*City of Wheeling comprised the townships of Center, Clay, Madison, Union, Webster and Washington.

†No colored population given in 1860.

**Incorporated with Moundsville in 1863.

Appendix C., Important State Papers

1. A Declaration of the People of Virginia Represented in Convention at the City of Wheeling Thursday, June 13, 1861.

The true purpose of all government is to promote the welfare and provide for the protection and security of the governed, and when any form or organization of government proves inadequate for, or subversive of this purpose, it is the right, it is the duty of the latter to abolish it. The Bill of Rights of Virginia, framed in 1776, reaffirmed in 1830, and again in 1851, expressly reserves this right to a majority of her people. The act of the General Assembly, calling the Convention which assembled at Richmond in February last without the previously expressed consent of such majority, was therefore a usurpation; and the Convention thus called has not only abused the powers nominally entrusted to it, but with the connivance and active aid of the executive, has usurped and exercised other powers, to the manifest injury of the people which, if permitted, will inevitably subject them to a military despotism.

The Convention, by its pretended ordinances, has required the people of Virginia to separate from and wage war against the government of the United States, and against citizens of neighboring States, with whom they have heretofore maintained friendly, social, and business relations:

It has attempted to subvert the Union founded by Washington and his co-patriots, in the purer days of the republic which has conferred unexampled prosperity upon every class of citizens, and upon every section of the country:

It has attempted to transfer the allegiance of the People to an illegal confederacy of rebellious States, and required their submission to its pretended edicts and decrees:

It has attempted to place the whole military force and military operations of the Commonwealth under the control and direction of such confederacy for offensive as well as defensive purpose:

It has, in conjunction with the State executive, instituted, wherever their usurped power extends, a reign of terror intended to suppress the free expression of the will of the people, making elections a mockery and a fraud.

The same combination, even before the passage of the pretended ordinance of secession, instituted war by the seizure and appropriations of the property of the Federal Government, and by organizing and mobilizing armies, with the avowed purpose of capturing or destroying the Capital of the Union:

They have attempted to bring the allegiance of the people of the United States into direct conflict with their subordinate allegiance to the State, thereby making obedience to their pretended ordinances, treason against the former.

We, therefore, the delegates here assembled in convention to devise such measures and take such action as the safety and welfare of the loyal citizens of Virginia may demand, having maturely considered the premises, and viewing with great concern the deplorable condition to which this once happy Commonwealth must be reduced unless some regular adequate remedy is speedily adopted, and appealing to the Supreme Ruler of the Universe for the rectitude of our intentions, do hereby in the name

and on the behalf of the good people of Virginia, solemnly declare that the preservation of their dearest rights and liberties and their security in person and property, imperatively demand the reorganization of the government of the Commonwealth, and that all acts of said Convention and Executive, tending to separate this Commonwealth from the United States, or to levy and carry on war against them are without authority and void; and that the offices of all who adhere to the said Convention and Executive, whether legislative, executive or judicial, are vacated.

2. An Ordinance for the Reorganization of the State Government. (Passed June 19, 1861.)

The people of the State of Virginia, by their Delegates assembled in Convention at Wheeling, do ordain as follows:

1. A governor, lieutenant governor, and attorney general for the State of Virginia, shall be appointed by this convention, to discharge the duties and exercise the powers which pertain to their respective offices by the existing laws of the state, and to continue in office for six months, or until their successors be elected and qualified; and the general assembly is required to provide by law for an election of governor and lieutenant-governor by the people as soon as in their judgment such election can be properly held.

2. A council, to consist of five members, shall be appointed by this convention, to consult with and advise the governor respecting such matters pertaining to his official duties as he shall submit for the consideration and to aid in the execution of his official orders. Their term of office shall expire at the same time as that of the governor.

3. The delegates elected to the general essembly on the twenty-third day of May last, and the senators entitled under existing laws to seats in the next general assembly, together with such delegates and senators as may be duly elected under the ordinances of this convention, or existing laws, to fill vacancies who shall qualify themselves by taking the oath or affirmation hereinafter set forth, shall constitute the legislature of the State to discharge the duties and exercise the powers pertaining to the general assembly. They shall hold their offices from the passage of this ordinance until the end of the terms for which they were respectively elected. They shall assemble in the city of Wheeling on the first day of July next, and proceed to organize themselves as prescribed by existing laws, in their respective branches. A majority in each branch of the members qualified as aforesaid, shall constitute a quorum to do business. A majority of the members of each branch thus qualified, voting affirmatively shall be competent to pass any act specified in the twenty-seventh section of the fourth article of the constitution of the state.

4. The governor, lieutenant-governor, attorney general, members of the legislature, and all officers now in the service of the state, or of any county, city or town thereof, or hereafter to be elected or appointed for such service, including the judges and clerks of the several courts, sheriffs, commissioners of the revenue, justices of the peace, officers of the city and municipal corporations, and officers of militia; and officers and privates of volunteer companies of the State, not mustered into the service of the United States, shall each take the following oath or affirmation before proceeding in the discharge of their several duties:

"I solemnly swear (or affirm), that I will support the constitution of the United States, and the laws made in pursuance thereof, as the supreme law of the land, anything in the constitution and laws of the state of Virginia, or in the ordinances of the convention which assembled at Richmond on the thirteenth of February, eighteen hundred and sixty-one, to the contrary notwithstanding; and that I will uphold and defend the government of Virginia as vindicated and restored by the convention which assembled at Wheeling on the eleventh day of June, eighteen hundred and sixty-one."

5. If any elective officer, who is required by the preceeding section to take such oath or affirmation, fail or refuse so to do, it shall be the duty of the governor upon satisfactory evidence of the fact, to issue his writ declaring the office to be vacant; and providing for a special election to fill such vacancy at some convenient and early day to be designated in said writ; of which due publication shall be made for the information of the persons entitled to vote at such election; and such writ may be directed, at the discretion of the governor, to the sheriff, or sheriffs of the proper county or counties, or to a special commissioner or commissioners to be named by the governor for the purpose. If the officer who fails or refuses to take such oath or affirmation be appointed by the governor, he shall fill the vacancy without writ. but if such officer be appointed otherwise than by the governor or by election, the writ shall be issued by the governor, directed to the appointing power, requiring it to fill the vacancy.

ARTHUR I. BOREMAN, *President.*

G. L. Cranmer, *Secretary.*

3. An Act Giving the Consent of the Legislature of Virginia in the Formation and Erection of a New State Within the Jurisdiction of This State.

(Passed May 13, 1862.)

1. Be it enacted by the General Assembly, That the consent of the Legislature of Virginia be and the same is hereby given to the formation and erection of the State of West Virginia, within the jurisdiction of this State, to include the counties of Hancock, Brooke, Ohio, Marshall, Wetzel, Marion, Monongalia, Preston, Taylor, Tyler, Pleasants, Ritchie, Doddridge, Harrison, Wood, Jackson, Wirt, Roane, Calhoun, Gilmer, Barbour, Tucker, Lewis, Braxton, Upshur, Randolph, Mason, Putnam, Kanawha, Clay, Nicholas, Cabell, Wayne, Boone, Logan, Wyoming, Mercer, McDowell, Webster, Pocahontas, Fayette, Raleigh, Greenbrier, Monroe, Pendleton, Hardy, Hampshire and Morgan, according to boundaries and under the provisions set forth in the constitution for the said State of West Virginia and the schedule thereto annexed, proposed by the convention which assembled at Wheeling, on the twenty-sixth day of November, eighteen hundred and sixty-one.

2. Be it further enacted, That the consent of the Legislature of Virginia be, and the same is hereby given, that the counties of Berkeley, Jefferson, and Frederick, shall be included in and form a part of the State of West Virginia whenever the voters of said counties shall ratify and assent to the said constitution, at an election held for the purpose, at such time and under such regulation as the commissioners named in the said schedule may prescribe.

3. Be it further enacted, That this act shall be transmitted by the executive to the senators and representatives of the commonwealth in congress together with a certified original of the said constitution and schedule, and the said senators and representatives are hereby requested to use their endeavors to obtain the consent of congress to the admission of the State of West Virginia into the Union.

4. This act shall be in force from and after its passage.

4. Act for the Admission of West Virginia into the Union and for Other Purposes.

Whereas the people inhabiting that portion of Virginia known as West Virginia did, by a convention assembled in the city of Wheeling, on the twenty-sixth of November, eighteen hundred and sixty-one, frame for themselves a constitution with the view of becoming a separate and independent State; and whereas at a general election held in the counties

composing the territory aforesaid; on the third day of May last, the said constitution was approved and adopted by the qualified voters of the proposed State; and whereas the Legislature of Virginia, by an act passed on the thirteenth day of May, eighteen hundred and sixty-two, did give its consent to the formation of a new State within the jurisdiction of the State of Virginia to be known by the name of West Virginia, and to embrace the following named counties, to-wit: Hancock, Brooke, Ohio, Marshall, Wetzel, Marion, Monongalia, Preston, Taylor, Tyler, Pleasants, Ritchie. Doddridge, Harrison, Wood, Jackson, Wirt, Roane, Calhoun, Gilmer, Barbour, Tucker, Lewis, Braxton, Upshur, Randolph, Mason, Putnam, Kanawha, Clay, Nicholas, Cabell, Wayne, Boone, Logan, Wyoming, Mercer, McDowell, Webster, Pocahontas, Fayette, Raleigh, Greenbrier, Monroe, Pendleton, Hardy, Hampshire and Morgan; and whereas both the convention and the legislature aforesaid, have requested that the new State should be admitted into the Union, and the constitution aforesaid being Republican in form, Congress doth hereby consent that the said forty-eight counties may be formed into a separate and independent State; Therefore,

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the State of West Virginia be, and is hereby, declared to be one of the United States of America, and admitted into the Union on an equal footing with the original States in all respects whatever, and until the next general census shall be entitled to three members in the House of Representatives of the United States; Provided, always, That this act shall not take effect until after the proclamation of the President of the United States hereinafter provided for.

It being represented to Congress that since the convention of the twenty-sixth of November, eighteen hundred and sixty-one, that framed and proposed the constitution for the said State of West Virginia, the people thereof have expressed a wish to change the seventh section of the eleventh article of said constitution by striking out the same and inserting the following in its place, viz.: The children of slaves born within the limits of this State after the fourth day of July, eighteen hundred and sixty-three, shall be free; and that all slaves within the said State who shall, at the time aforesaid, be under the age of ten years, shall be free when they arrive at the age of twenty-one years; and all slaves over ten and under twenty-one years shall be free when they arrive at the age of twenty-five years; and no slave shall be permitted to come into the State for permanent residence therein:" Therefore,

SEC. 2. Be it further enacted, That whenever the people of West Virginia shall, through their said convention, and by vote to be taken at an election to be held within the limits of the said State, at such time as the convention may provide, make and ratify the change aforesaid, and properly certify the same under the hand of the President of the convention, it shall be lawful for the President of the United States to issue his proclamation stating the fact, and thereupon this act shall take effect and be in force from and after sixty days from the date of said proclamation.

Approved December 31, 1862

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Pittsburg Gazette (1786); *The Monongalia Gazette* (1803, 1805); *Martinsburg Gazette* (1813); *Farmer's Repository*, Charles Town, (1815, 1816, 1826); *Independent Virginian*, Clarksburg (1819-....); *Western Courier*, Charleston, (1823); *Monongalia Chronicle* (1825, 1828); *West Virginian and Kanawha County Gazette* (1826); *The Republican*, Morgantown, (1829); *Potomac Pioneer*, Shepherdstown, (1830); *The Kanawha Banner* (1830-34); *The Monongalian*, Morgantown, (1831); *The Parkersburg Gazette* (1845); *Richmond Enquirer* (1849); *Monongalia Mirror* (1849, 1850); *Wheeling Intelligencer* (1852-....); *Kanawha Valley Star* (1856-61).

The latter two volumes were especially valuable for the study of the decade preceding the Civil War. The *Intelligencer* is a valuable source of historical material for subsequent periods. For the ante-bellum period, the *Richmond Enquirer* and Niles' *Register* were valuable.

For the period of the war, in supplementing the information furnished by the *Intelligencer* and the *Annual Cyclopedia*, the author has obtained data from files of the *Baltimore Sun*, the *Cincinnati Commercial*, the *New York Tribune*, the *New York Herald*, the *New York Times* and *Harper's Weekly*.

For data relating to the Constitutional Convention of 1872, the *Kanawha Daily* (Charleston, 1872) is especially useful.

In collecting facts relating to the recent industrial development the writer has been especially aided by various historical industrial editions of newspapers, such as that of the *Fayette Journal* (1911).

Say not the struggle nought availeth,
  The labor and the wounds are vain,
The enemy faints not, not faileth,
  And as things have been they remain.

If hopes were dupes, fears may be liars;
  It may be, in yon smoke concealed,
Your comrades chase e'en now the fliers,
  And, but for you, possess the field.

For while the tired waves, vainly breaking,
  Seem here no painful inch to gain,
Far back, through creeks and inlets making,
  Comes silent, flooding in, the main.

And not by eastern windows only,
  When daylight comes, comes in the light,
In front, the sun climbs slow, how slowly,
  But westward, look, the land is bright.

—ARTHUR HUGH CLOUGH.

HISTORICAL LABORATORY, WEST VIRGINIA UNIVERSITY.

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The Railroads in the Development of West Virginia

By Hon. Henry G. Davis (formerly senator).

That the railroad is a necessary factor in the development, and the most important agency in the commercial expansion of a state, is an admitted truism, and it is particularly emphasized in the history of West Virginia. This state stands pre-eminently at the head of all the states in the Union, not only as a priority, but also as to the physical strength, financial standing and commercial importance it has attained through this agency.

West Virginia, a hill state seemingly impassable, unexplored and sparsely settled, with a determination to engage in the commerce of the country, was a pioneer state in inviting a project of railroad building, when it joined hands with Maryland in assisting the construction of the first railroad in the New World. It has continued to co-operate with railroads in proposed construction, and as a consequence ranks high as one of the most important commercial states in the Union in every line of industry and agriculture.

The first method of communication between West Virginia and the eastern coast was by means of the old National Pike which ran between, Baltimore, Cumberland, Md., Uniontown, Pa., and Wheeling, W. Va. Baltimore at that time—between 1805 and 1852—was the eastern market for West Virginia and Ohio, and commerce was conducted by mean of long trains of Conestoga wagons, for which the rates of service were high.

Wheeling, by means of its geographical location on the Ohio River, was the principal river town west of the Alleghenies and one of the leading centers of trade of the vast country now comprising the Central West. Its greatest business however was confined to the river traffic between Pittsburg, Cincinnati, Louisville and St. Louis.

In 1827 the Legislature of Maryland passed an act to incorporate a joint stock company, styled the Baltimore & Ohio Railroad Company, the building of which was begun on July 4th, 1828, with the Ohio river as an objective point.

West Virginia soil was first reached at Harper's Ferry on December 1st, 1834. The great struggle of crossing the almost impassable mountains began at that point; and in 1836 the city of Wheeling was officially considered the most suitable western terminal from a commercial point of view, and surveys were completed through this portion of Virginia.

The State of Virginia (the commonwealth of Virginia was not separated into two states until June 20th, 1863), subscribed to the building of the line through the state, as did also the city of Wheeling, and it was

determined to hurry the completion of the through line by building eastward from Wheeling to meet the line coming west. This line was practically completed to Fairmont in 1852, its progress being slow because all materials had to be hauled from eastern mills through unbroken mountains.

On December 24, 1852, the two lines were officially united at Roseby Rock, West Virginia, and the first through train from Baltimore to Wheeling left the Maryland city on January 10, 1853.

The wedding of the Ohio River with the Chesapeake Bay was the occasion of a great celebration, for it meant to Northern and Western Virginia the dawn of a new era in business. It placed the territory in direct communication with the markets of the country, and the superior transportation facilities over wagon methods encouraged the investment of capital in the development of West Virginia industrially.

The railroads in sixty years covered 3556 miles, growing at the approximate rate of 60 miles a year.

While these figures are startling, another feature should be considered at the same time; when these railroads were built, the money came into the state from points outside the state; the railroad property being in the state became assessable to the state for taxes, showing a double profit to the state. It should further be considered that the railroads naturally gave employment to the people in the state.

From the Auditor's report of the taxable property of railroads in the State of West Virginia for 1912, the total amount paid to the state on such property was $1,401,092.32.

As a matter of record, the following list of steam railroads in West Virginia with the mileage and assessed value of each, is appended:

		Miles of main track in State	Assessed Value
1.	Alexander & Eastern Railway Co.	14.50	$ 25,000
2.	Buffalo Creek & Gauley Railroad Co.	19.00	100,000
3.	Benwood & Wheeling Connecting Railway Co.		60,000
4.	Belington & Northern Railroad Co.	4.06	30,000
5.	Baltimore & Ohio Railroad Co. System	1,071.61	77,650,000
6.	Big Sandy & Cumberland Railroad	.30	2,000
7.	Beaver Creek Railroad Co.	6.25	15,000
8.	Cranberry Railroad Co.	12.00	50,000
9.	Cairo & Kanawha Railway Co.	15.91	60,000
10.	Campbell's Creek Railroad Co.	13.33	135,000
11.	Cumberland Valley & Martinsburg Railroad Co.	24.48	500,000
12.	Cumberland & Pennsylvania Railroad Co.	.21	18,000
13.	Coal & Coke Railway Co.	196.75	4,900,000
14.	Chesapeake & Ohio Railway Co. System	641.52	35,000,000
15.	Dry Fork Railroad Co.	29.86	500,000
16.	Erbdon & Summersville Railroad Co.	6.00	20,000
17.	Elk & Little Kanawha Railroad Co.	21.00	250,000
18.	Glady & Alpena Railroad Co.	18.00	80,000
19.	Guyan, Big Ugly & Coal River Railway Co.	10.00	40,000
20.	Glenray & Richwood Railroad Co.	9.00	40,000
21.	Hampshire & Southern Railroad Co.	38.60	425,000
22.	Iron Mountain & Greenbrier Railroad Co.	26.59	50,000
23.	Island Creek Railroad Co.	6.77	375,000
24.	Kanawha & West Virginia Railroad Co.	37.38	550,000
25.	Kanawha & Eastern Railroad Co.	.75	3,000
26.	Kanawha Central Railroad Co.	4.70	30,000
27.	Kellys Creek & Northwestern Railroad Co.	6.35	60,000
28.	Kanawha, Glen Jean & Eastern Railroad Co.	14.20	300,000
29.	Kanawha & Coal River Railroad Co.	12.00	50,000
30.	Kellys Creek Improvement Co.	6.16	36,000
31.	Kanawha & Michigan Railroad Co.	99.44	4,750,000
32.	Lorama Railroad Co.	14.00	55,000
33.	Longdale Iron Co. (Mann's Creek R. R.)	9.00	16,050
34.	Little Kanawha Railroad Co.	30.44	200,000

35.	Lewisburg & Ronceverte Railway Co.	5.75	37,550
36.	Loop & Lookout Railroad Co.	5.00	35,000
37.	Meadvale & Somerville Railroad Co.	11.00	20,000
38.	Morgantown & Kingwood Railroad Co.	48.74	1,000,000
39.	Marlinton & Camden Railroad Co.	10.50	78,000
40.	Norfolk & Western Railway Co. System	437.77	32,500,000
41.	Pickens & Hackers Valley Railroad Co.	16.50	45,000
42.	Pickens & Addison Railway Co.	19.00	45,000
43.	Panther Railroad Co.	7.00	5,000
44.	Pittsburg, Wheeling & Kentucky Railroad Co.	28.02	2,000,000
45.	Pittsburg, Cincinnati, Chicago & St. Louis Rwy. Co.	29.30	1,368,695
46.	Preston Railroad Co.	14.00	30,000
47.	Pocahontas Railroad Co.	7.00	20,000
48.	Piney River & Paint Creek Railroad Co.	6.36	125,000
49.	Randolph & Pocahontas Railroad Co.	19.00	100,000
50.	Raleigh & Pocahontas Railroad Co.	1.25	100,000
51.	Sewell Valley Railroad Co.	21.00	125,000
52.	Stroud's Creek & Muddlety Railroad Co.	6.00	80,000
53.	Valley River Railroad Co.	11.00	45,000
54.	Virginian Railway Co.	139.60	5,500,000
55.	Wabash-Pittsburg Terminal Railway Co.	4.85	550,000
56.	West Virginia Midland Railroad Co.	42.06	140,000
57.	West Virginia & Southern Railroad Co.	3.10	40,000
58.	West Virginia Northern Railroad Co.	10.97	110,000
59.	Winifrede Railroad Co.	7.43	150,000
60.	Wheeling Terminal Railway Co.	7.28	800,000
61.	Western Maryland Railway Co.	197.65	10,000,000
62.	Walkerville & Ireland Railroad Co.	6.25	15,000
63.	White Oak Railway Co.	10.44	225,000
64.	Winding Gulf R. R. Co.	.....	2,500
	TOTAL	3,556.98	$181,666,795

Another fact to be considered is that railroads are compelled to lay out such an enormous amount of money in building, that it takes years to begin getting anything like a reasonable return on the money, as compared with any other business. It is not generally known but it in a fact nevertheless, that every railroad in West Virginia, fifty miles or more in length, with probably one exception, has been in the hands of receivers at sometime.

Whether or not such receivership was occasioned through the extravagant expenditure of the railroad's money, the state has been benefitted by this expenditure.

The first commodity that West Virginia had to offer to the country was its bituminous coal, and to make this of any value, railroads were built into the coal fields to get it to the market. The coal being of a desirable quality, the market demand was great. In the year 1912 there were 65,000,000 tons of coal shipped out of the state and at the average price of $1.00 per ton at the mine, the state became $65,000,000 richer.

Just what influence and effect railways have upon values is illustrated in the following table of comparison of property values of certain counties in West Virginia, all of which were without railways in 1880; since which time railways were built in two of them:

COUNTIES WITHOUT RAILWAYS	Property Values 1880	Property Values 1912	Total Increase	Per Cent.
Hardy	$2,428,122	$5,267,456	$2,839,334	116
Pendleton	1,587,953	4,420,715	2,832,762	177
	4,016,075	9,688,171	5,672,096	141

COUNTIES WITH RAILWAYS

Randolph	1,102,474	22,497,425	21,394,951	1,940
Tucker	479,702	13,688,517	13,208,815	2,753
	1,582,176	36,185,942	34,603,766	2,187

The assessed value of railways alone in the latter two counties in 1912, was as follows:

Randolph	$4,770,632
Tucker	2,510,737

While the percentages of increase in Randolph and Tucker counties, which have only a few miles of railways, over the percentages of increase for Hardy and Pendleton counties that have no railways, is enormous, the proportion of increase in other counties that have more railways is even greater.

Railroads bring not only wealth, but also enlightenment and convenience to the communities through which they run. Compare for instance the hardships, inconvenience and loss of time when traveling by stage coach, with the cheapness, comfort, and dispatch of the modern train.

A very small percentage of the traveling public ever stops to make a comparison between the swiftly running train of today and the stage coach of not so many years ago. Just think what it would mean to the business man of this generation if he had to go from New York to San Francisco in a prairie schooner to keep a business engagement. Today a man may conclude his business in Chicago, leave in the afternoon, comfortably settle himself in a palatial train and be in New York, a thousand miles away, for business in the morning. And think of the comforts he may enjoy enroute. Meals served in attractive dining cars; the use of a well stocked library; barbershop; bath; stock market reports: stenographer; valet service and nearly all the comforts of a hotel.

Notwithstanding all this, the cost of the trip is far less than it could have been made for in the stage coach days. Such a journey could not have been made with a team in fewer than twenty five days at a cost many times in excess of the present day service afforded by railroads.

And yet there are those who delight in anathematizing these great common carriers without which we would not have our present day development and progress.

Apropos of the way in which the railroads annihilate distance, it may be interesting to the reader to insert here a time table of 1835-36, for the winter arrangement of a stage line well known in those days:

"The Mail Pilot Line leaves Columbus for Wheeling, daily it six a. m., reaching Zanesville at one p. m., and Wheeling at six a. m., the next morning.

"The Good Intent Line leaves Columbus for Wheeling, daily at six p. m. through in twenty hours to Wheeling (127 miles) in time for stages for Baltimore and Philadelphia."

But, let us take a simpler example of the great benefit of the railroads. Let us suppose that a farmer wished to visit a point sixty miles

away. Before the days of railroads it would have required at least three days to go and come, and transact his business while there. He would have had to supply himself with nine meals; his team with the same, count the wear and tear, to say nothing of losing the use of his team on the farm or figuring his own time.

How different now! He boards a train after breakfast, reaches his destination in an hour and a half, transacts his business and is home again for supper in the evening—all at the cost of a trifle as compared with the old way.

Surely the people are indebted to the railroads, and West Virginians are no exception.

Considering these facts showing what the railroads have been to West Virginia in the past sixty years, how much more important they must be for the state's future under the present tremendous business activity.

West Virginia as a mineral and agricultural state has recently proved its claim that it affords more opportunities in these directions than any other state; and bids fair to become one of the leading fruit producing states in the Union.

The manufacturing possibilities of the state with its cheap fuel—coal and gas—are beyond computation. Therefore it stands to reason that new railroads will have to be built, and as has already been pointed out, the cost of building and maintaining a railroad in such mountainous country as West Virginia, is infinitely more than in a level country, it will require a large investment of capital. However, where the construction of new lines is warranted by the laws of supply and demand, the capital will be forthcoming. Just so long as the railroads prosper, so will the state prosper, and the reverse of this statement is equally true.

Improvement on Public Highways

By Charles P. Light, Field Secretary, American Highway Association.

There are few economic questions at the present time that command the attention of the thinking public quite so much as that of highway improvement. A striking evidence of this is to be found in the great number of good roads conventions that are being held throughout the country. They are as popular now as debating societies and quilting parties were twenty or thirty years ago. As a result of this agitation, the majority of the states have organized state highway departments after the commission plan, or with a single commissioner in charge of road work. It will only be a few years until each state will have such a department, in order that proper and continuous attention may be given to road construction and maintenance.

It is impossible to emphasize the subject of maintenance too forcibly as it is the most important feature of highway work at the present time.

It comes very near being criminal to spend money for the construction of highways and then not maintain them properly. How best to maintain the various types of roads comes largely as a result of experience, and experience is increased greatly by tenure in office. It is to be hoped that an efficient and competent man may be appointed chief road engineer of the recently created State Road Bureau, and that when once appointed he may be permitted to develop along with his work.

Highway conditions will not be permanently bettered until a majority of the tax payers of the state realize that there must be a well organized state highway department removed from all partisan political influences so that it may not be subjected to the whims and fancies of so-called statesmen. Better roads will come as soon as a majority of the people want them badly enough to have them. It is not nearly so much a question of securing money to have better roads, as it is in spending the money now being raised, wisely and economically.

We must not forget that improved roads will bring better schools and greater attendance, better health and quicker medical attention, better farms and more cultivated land, better crops and cheaper transportation, better economic conditions and more producers, better social conditions and less isolation, better church attendance and better citizens.

The desire for cheaper transportation facilities on the part of the great mass of our people will have much to do in the future toward securing improved highway conditions. Bad roads have a great deal to do with the high cost of living. Improved highway conditions will not only have a tendency to keep young men on the farms but will give those who are there, a greater profit on their various farm products, because of the cheaper transportation brought about by good roads.

Postal Development in West Virginia

By Arthur Boreman Smith.

Postal service, established in the colony of Virginia as early as 1692, was first extended to the trans-Allegheny territory of Western Virginia in 1794 by the creation of post offices at Morgantown and Wheeling.

The first later official reference to improved mail routes in what is now West Virginia occurs in a report on the " finest" route in the country, from New York to Cincinnati. Railroad service extended to Cumberland, Md., thence to Wheeling by four-horse coach daily, at a "running speed" of seven miles an hour. Troubles seemed to center at Wheeling. The Postmaster-General complained that "this important mail was always detained at the ferry of the Ohio River some ten or twelve hours," because "the proprietor of the ferry could not be induced to encounter the danger of crossing the mail stages in the night." He regrets that "the General Government, while expending much money in

constructing the Cumberland road east and west of the Ohio, omitted to construct a bridge over that stream."

There was a controvery with Virginia as to tolls at the toll-gate east from Wheeling. The General Government had ceded the National road to the states through which it passed, reserving the right to its use as a post road free from toll. Virginia reserved the right to alter the conditions of the cession at will regardless of Congress. The cession appears to have been made in 1832 and in 1836 Virginia receded and proceeded to charge toll. The toll for each mail coach was eighty-eight cents and the contractor refused to pay. Mail from the east, when stopped, returned to Triadelphia and remained there until the Wheeling postmaster supplied the necessary cash. There was much correspondence, but the records fail to disclose how the matter was adjusted.

It may be interesting to note that the "running time" from New York to Wheeling in 1835, was 83 hours; in 1837, 67 hours; in 1885, 18 hours and 15 minutes, and in 1913, 17 hours and 45 minutes.

The first Post-Office Directory obtainable was included in the report of the Postmaster-General for the fiscal year ending June 30, 1841. At that time there were 206 post-offices within the limits of the present State of West Virginia, embraced in 28 counties, as follows:

Berkeley, 7; Braxton, 4; Brooke, 4; Greenbrier, 10; Hampshire, 16; Hardy, 6; Harrison, 14; Jefferson, 7; Kanawha, 13; Logan, 4; Marshall, 6; Mason, 5; Nicholas, 3; Ohio, 3; Pendleton, 7; Pocahontas, 5; Preston, 5; Randolph, 6; Tyler, 7; Wood, 13.

Hampshire headed the list with 16 offices, while Mercer had but one, Princeton, the county seat. Jefferson paid her postmasters $1,584.96, and afforded $3,818.49 revenue to the Department. Ohio county came next paying postmasters $2,162.49, leaving but $2,589.30 "nett proceeds." The salary of the postmaster at Wheeling was $2,000.

The Postal Guide for 1912 reports 2,117 post-offices in the State, two-thirds of which have money-order facilities. About 600 offices have been discontinued by rural delivery. Post-offices of the first class are Bluefield, Charleston, Clarksburg, Fairmont, Huntington, Parkersburg and Wheeling. Those of the second class are Buckhannon, Charles Town, Elkins, Grafton, Hinton, Keyser, Mannington, Martinsburg, Morgantown, Moundsville, New Martinsville, Piedmont, Richwood, Sistersville, Welch, Wellsburg, Weston and Williamson. There are 76 third-class offices; in all, 101 Presidential post-offices in the State. Postal development during the past fifteen years has been phenomenal. West Virginia has kept pace with her most progressive sisters and has distanced many of them in the race.

Transportation of the Mails.

Stupendous difficulties were encountered during the early settlement of the State in carrying the mails to the widely scattered communities. The Postal Regulations require that all county seats shall have mail service. The hardy pioneers believed in law and order, and county government received prompt attention. It was incumbent upon the Post-Office Department to find the county seat and place it in com-

munication with the General Government, which accounts for the letters "C. H." after the names of many offices. A future city had been born but not named.

Roads were few and rough; great mountains and vast forests intervened; numerous bridgless streams must be crossed, but the trusty carrier, at risk of life and limb, made his way "with safety, certainty and celerity" undaunted by the perils that beset him. A glance at an outline of a few of the routes as advertised in 1850 will give an idea of the distances and difficulties encountered, yet the routes at that time were not comparable to those of forty to fifty years earlier. Some roads had been constructed, the Baltimore & Ohio Railroad skirted the northern border, and villages, with accommodations for man and beast had come into existence. Following are a few of the routes:

From	To	Miles.	Times a Week.	
Winchester	Williamsport, Md.	42	2	
Winchester	Harpers Ferry	34	6	
Romney	Clarksburg	109	3	
Morgantown	Wheeling	67	1	
Clarksburg	Uniontown, Pa.	66	6	
Clarksburg	Parkersburg	85	3	
Clarksburg	Beverly	57	1	
Lumberport	Middlebourne	40	1	
Wheeling	Parkersburg.	95	3	by steamboat when possible.
Parkersburg	Beverly	134	3	
Weston	Braxton C. H.	48	1	
Staunton	Lewisburg	103	6	
Staunton	Beverly	106	3	
Lewisburg	Kanawha C. H.	104	3	
Lewisburg	Huntersville	59	1	
Lewisburg	Fayetteville	60	1	
Kanawha C. H.	Guyandotte	48	3	
Kanawha C. H.	Point Pleasant	55	3	
Kanawha C. H.	Glenville	76	1	
Kanawha C. H.	Logan C. H.	64	1	

There were numerous other routes equally difficult; but those given afford a fair idea of distances traveled and the character of the servvice 63 years ago. The records do not disclose the cost of the service, but that it was upon the lowest cash basis is a safe assumption and then there were stiff fines for failures.

There are now 812 star, special-office, mail-messenger, railroad, steamboat and electric-car routes in the State; length, 8,288.57 miles; distance traveled per annum, 7,045,665.88 miles; annual rate of expenditure, $517,703.23. Every portion of the State is covered with service so complete that the most remote section is in constant communication with the whole world. With but few exceptions, service ranges from six-times-a-week in country districts to several times a day on railroad lines.

City Delivery.

Fifteen years ago, but four cities, Charleston, Huntington, Parkersburg and Wheeling had city delivery. Service is now extended to Bluefield, Buckhannon, Charles Town, Clarksburg, Elkins, Fairmont, Grafton, Hinton, Keyser, Mannington, Martinsburg, Morgantown, Moundsville, Sistersville, Wellsburg and Weston—20 cities. There are several other cities in which service will be possible within a short time, among which are, Alderson, Cameron, Lewisburg, Marlinton, Montgomery, Pied-

mont, Point Pleasant, Princeton, Richwood, Roncevert, Salem, Spencer and Sutton.

In order to show the relative standing of West Virginia as to city delivery among other states, the following are named: Alabama has free delivery in 17 cities; Florida, 17; Kentucky, 23; Louisiana, 11; Maine, 23; Nebraska, 18; Oregon, 17; Tennessee, 15; Virginia, 20. It is evident that West Virginia is abreast of the times in this particular branch of the service.

Government Buildings.

Wheeling was the first city in the State to be granted a building in which to house her post-office. That building, however, was known as the "Custom House." The post-office was merely incidental. The original building has passed away and has been replaced by a splendid, commodious structure. Charleston, Clarksburg, Parkersburg and Martinsburg came next. Charleston, like Wheeling, has out-grown the original structure and a magnificent new building is nearing completion. Government buildings have also been erected in Bluefield and Huntington. The Parkersburg and Huntington buildings have become so crowded as to necessitate extensions or else new buildings.

Buildings are in course of construction or ordered by Congress in Buckhannon, Elkins, Fairmont, Grafton, Hinton, Keyser, Mannington, Morgantown, Moundville, Sistersville, Wellsburg and Weston. But few states are making greater progress in this respect than West Virginia. Considering area, even Oklahoma and Texas, the two states developing most rapidly, have scarcely excelled.

Registered Mail.

It is a safe assertion that but few persons have an idea of the immense amount of registered mail matter handled by the post-offices of the State. The latest available report is that of the fiscal year ending June 30, 1911, which shows 486,444 domestic letters and 41,934 parcels; 34,990 foreign letters and 3,199 parcels, and 40,393 official free letters and parcels, a total of 607,560 registered letters and parcels originated during that year. The fees amounted to $56,656.70. In this respect West Virginia ranks with Indiana, Iowa, Virginia and Wisconsin.

Rural Free Delivery.

To West Virginia belongs the honor of being the State selected for the first experiment in rural free delivery. The first rural service in the United States was installed at Charles Town, Jefferson County, October 6, 1896. Hon. William L. Wilson was Postmaster-General, the only West Virginian to hold that position. A. W. Machen the Superintendent of Free Delivery was intrusted with the task of installing the service. The matter had been passed over for two years by Mr. Wilson's predecessor, and it can truthfully be said that he was not favorably inclined, fearing the cost. Supt. Machen detailed his chief clerk and instructed him to proceed to Jefferson county and arrange the service, as a com-

pliment to Mr. Wilson. The recommendation was for three routes at Charles Town, one at Halltown, and one at Uvilla. Carrier Gibson, Route No. 1, Charles Town, is still in the service and is Carrier No. 1, United States of America. Salaries of carriers were fixed at $200 the year. Service was crude but highly appreciated by the people.

It is rather singular, but a fact, that West Virginians did not readily appreciate the advantages of the service. The five routes in operation June 30, 1897, increased to six the next year, to 16 in 1899, 27 in 1900, 37 in 1901, 52 in 1902, 70 in 1903, 136 in 1904, 163 in 1905, 221 in 1906, 270 in 1907, 312 in 1908, 348 in 1909, 364 in 1910, 367 in 1911, 370 in 1912, and 375 January 31, 1913.

There have been 566 petitions for service of which 45 are now pending. But three routes have been discontinued, of which two were merged in other routes. It would thus appear that 133 applications have been refused by the Department. The refusal by the Department to install service was due in most instances to opposition by local postmasters and star-route contractors. It is also a fast that representatives in Congress have been lax in many instances, fearing to incur the displeasure of parties who protested against changes in the existing service.

Rural delivery emanates from 200 post-offices, located in 36 counties. There have been remarkably few changes in the service. Occasional extensions and revisions due to opening of new roads comprise the bulk of the changes. There should be at least 1,000 routes in the State and would be were proper efforts made. An inspector can only report facts. His recommendation, even if adverse, is not final. Establishment depends wholly upon the wishes of the senators and representatives.

Complete county service is in operation in but two counties, Marion and Wood. There are many other counties in which complete service is possible, namely all of those bordering on the Ohio River, all west of the Allegheny Mountains and north of the Great Kanawha, and several in the eastern section.

It may be interesting to note that on Christmas Day, 1909, 67,313 pieces of mail were handled by the 364 carriers then in service, an average of nearly 200 pieces per route. During March, April and May, 1909, the amount of mail handled was:

	Delivered	Collected
Registered letters and packages	4,549	5,906
Letters	941,207	611,967
Postal cards	579,937	407,339
Newspapers	1,787,225	3,921
Circulars and packages	510,886	17,615
TOTAL	3,823,798	1,046,748

Applications for money orders	14,916
Value of stamps on mail collected by carriers	$17,208.16
Value of stamps sold by mail carriers	$17,211.19

Following is the result of a count of mail handled during May, 1911, and

October, 1912. Attention is directed to the remarkable increase in the amount of mail handled during a period of eighteen months:

May, 1912	Delivered	Collected
First Class	530,758	297,816
Second Class	716,787	2,039
Third Class	239,475	1,821
Fourth Class	23,180	1,782
TOTAL	1,510,200	303,348
October, 1912	Delivered	Collected
First Class	666,739	317,334
Second Class	852,572	3,239
Third Class	295,641	3,325
Fourth Class	26,064	1,737
TOTAL	1,841,016	321,659
Per Cent. of Increase	22.6	6.03

March 1, 1908, carriers reported 412 miles of macadam road and 6,196 miles of gravel, earth and sandy roads, the total mileage being 6,607 miles, giving an average length of 22 miles per route. The amount expended for up-keep of roads was $246,857. The average increase of farm values was 18 per cent. In addition to the rural free delivery service, star route carriers delivered and collected mail free of cost to patrons, but the service is not satisfactory to any who have had the rural delivery service.

Much has been written about the excessive cost of rural delivery. Latest reports show that the average rate of cost per mile of length was $42.22 for star routes, and $41.67 for rural routes. The inferior service is most expensive and subject to the additional cost of maintaining post offices on the star routes.

Aside from the value of rural free delivery to the direct patrons, no other agency has developed so healthy a sentiment for good roads. Every carrier is a daily reminder of the importance of good roads to at least 100 farmers. In Jefferson County, the county engineer made an earnest effort to improve the roads covered by rural routes, and Jefferson has the best roads of any county in the state. The same incentive has produced most satisfactory results in Marion and Wood counties.

Postal Savings.

The Postal savings feature of the service has been in operation but a short time. It is scarcely possible to arrive at what might be termed a satisfactory development of that branch of the service.

On June 30, 1912, there were 720 depositors, with $48,924 on deposit. The amount of bonds issued to depositors, January 1, 1912, was $9.570.

There are now 136 post-offices in the State designated as depositories, as follows: First class offices, 7; second class, 18; third class, 75; fourth class, 35 these offices are located in the more important cities and towns where banks exist. It is expected deposits will rapidly increase when the service is extended into the country districts

Total deposits to June 30, 1912, were $84,761; withdrawals, $35,837; leaving a balance, as stated above, of $48,924. Deposits increased to $61,485 by September 30, 1912.

There is no accurate data available as to operation of the parcels post which went into effect January 1, 1913.

NOTE.—It is a source of regret that it is almost impossible to glean from the records of the Post Office Department a comprehensive and continuous account of postal development. Practically all of the records were destroyed by fire in 1836. Such scraps as remain have been stored and are inaccessible to a large degree. Officials of the Department were most courteous and gave all possible assistance. Printed documents are scarce, but little more than summaries are published. It is a source of regret that there is no history of the Department. The time at my disposal, after receiving the request to write a chapter on Postal Development in West Virginia, was somewhat limited, which is my only excuse for not making it more elaborate.

A. B. S.

Development of Telephone Service

By the Editor.

The first step toward a telephone system in West Virginia was the establishment of a telephone central office in Pittsburg on January 1, 1879, by the Central District and Printing Telegraph Company. The first telephone exchange in the state was established at Wheeling by the Central District company on May 15, 1880. An office was established at Parkersburg in 1882. Later, offices were established at Moundsville, Wellsburg and New Cumberland—and, gradually, at all the most important points in the state.

For several years each exchange was isolated. No connection was afforded from one office to another. The telephone horizon was but little broader than the horizon of vision. In a short time, however, just as demands had been made for a switch-board, the necessity for communication between various cities and towns arose. As a result, toll lines were built connecting various cities and gradually forming a net work of wires by means of which it is now possible to communicate with anyone within a radius of two thousand miles.

The first toll line in West Virginia was constructed in 1883 and connected Wheeling with Pittsburg. It practically followed the course of the Ohio and, consequently, when the next year the record flood came much of it was washed away and had to be rebuilt. This line was only the beginning in West Virginia. Wheeling was soon connected with Steubenville, Ohio, and Parkersburg; Morgantown was given a northern outlet through Uniontown Pennsylvania; Clarksburg and Parkersburg, and Fairmont and Clarksburg, and Fairmont and Morgantown were all connected, and by the year 1900 the state was a system of "highways for talk."

In the territory of the Central District Telephone Co., toll lines connecting the exchanges mentioned below were built at the dates given:

1895—Wheeling, W. Va.—Steubenville, O.
1895—Morgantown, W. Va.—Uniontown, Pa.
1896—Wheeling, W. Va.—Parkersburg, W. Va.
1896—Moundsville, W. Va.—Cameron, W. Va.
1899—Cameron, W. Va.—Fairmont, W. Va.
1899—Clarksburg, W. Va.—Parkersburg, W. Va.
1899—Clarksburg, W. Va.—Grafton, W. Va.
1900—Morgantown, W. Va.—Waynesburg, Pa.
1900—Clarksburg, W. Va.—Fairmont, W. Va.
1902—Fairmont, W. Va.—Morgantown, W. Va.

The early development of telephone service in southern West Virginia was begun by the Southern Bell Telephone and Telegraph company by the establishment of exchanges at Charleston and Huntington about 1888 or 1889. No other development was undertaken until 1896, when a toll line was constructed between Charleston and Montgomery, West Virginia, a distance of twenty-seven miles. About 1898 the company purchased an existing line owned by an independent company from Charleston to Saint Albans, and Winfield, a total distance of twenty-five miles.

The American Telephone and Telegraph company constructed the Cuyahoga Falls-Charleston line through to Charleston about 1897. From this time until the later part of 1901 there was no development by any of the Bell or associated companies, but from 1895 or 1896 until 1901 the independent companies were very active through southern West Virginia and many exchanges were constructed, including Charleston, Huntington, Point Pleasant, Spencer, Weston, Buckhannon, Sutton, Hinton, Alderson, Ronceverte and Lewisburg; also Elkins and surrounding territory. Many toll lines were also constructed in different sections of the state by independent companies. In the summer of 1901 the American Telephone and Telegraph company constructed what is known as the Petersburg-Georgetown line which was completed early in 1902.

In 1901 the Southern Bell company constructed exchanges in Point Pleasant and Montgomery, West Virginia, covering the New River coal fields and the greater part of Fayette county.

During the year 1903 the Point Pleasant-Ravenswood-Belleville toll line and the Ravenswood-Spencer toll line were constructed, connection being made at Belleville with the Central District and Printing Telegraph company; making a through line from Point Pleasant to Parkersburg. In 1904 exchanges were constructed at Ravenswood and Ripley, and the exchange at Spencer, which was constructed several years previous by a local company and sold to the Central District and Printing Telegraph company, was purchased by the Southern Bell Telephone and Telegraph company. In 1903 construction work was started on the Charleston-Sutton-Weston line which was not completed until in 1904. Another connection was established with the Central District and Printing Telegraph company at Jane Lew, West Virginia, giving a through route from Charleston to Clarksburg. Exchanges were constructed at Weston and Buckhannon in 1904.

In 1903 the Southern Bell company purchased the property of the West Virginia Telegraph and Telephone company, which included Hinton, Alderson, and Beckley exchanges and a number of Farmers' lines. During the same year the exchanges at Alderson and Hinton were entirely reconstructed new plants being installed; and early in 1904 the Beckley exchange was completely reconstructed, a new plant being installed.

In 1905 the Sutton-Richwood and also the Hinton- Bluefield line were constructed. Connection was established at Bluefield with the Bluefield Telephone company which had been operating in Bluefield and between Bluefield and Welch for a number of years. The Richwood exchange was constructed during 1907.

Construction work on the Huntington-Logan Toll Line was started in

1904 and completed in the early part of 1905. The Logan Exchange was completed during the latter part of 1905. The Spencer-Weston Toll Line was constructed in 1909. The Huntington, W. Va.,-Pikeville, Ky., Toll Line was completed in 1906. The Charleston-Madison Toll Line was constructed in 1909, the Madison exchange being opened in the early part of 1910.

The Southern Bell company purchased the Huntington Mutual Telephone company's property in January, 1910, and during that year the properties at Huntington were consolidated, which included toll lines from Huntington to Hurricane. In December the same year the Southern Bell company purchased the property of the Charleston Home Telephone company, which included the Charleston, East Bank, Montgomery, and Clendenin opposition exchanges, and also toll lines connecting same and extending to Hurricane and Buffalo, W. Va. These properties were consolidated with the Bell Plants during the summer of 1911. In 1912 the Southern Bell company transferred its West Virginia property to The Chesapeake & Potomac Telephone company, and in October, 1912, The C. & P. company purchased the property of the Point Pleasant Telephone company, and this property was consolidated with the Bell property May 1, 1913.

In the period from 1901 to 1910, a number of small exchanges were opened at various points on the toll lines indicated above. In January, 1901 there were only two Bell exchanges in the southern part of the state (Huntington and Charleston); while there are now twenty-four. On January 1, 1901 the Huntington exchange had about 230 stations and the Charleston exchange about 715, with no connecting stations. There are now 10,537 stations in the twenty-four exchanges, with 14,310 service and connecting stations, making a total of 24,847 stations.

At Charleston and Huntington, the plants owned by the company have been rebuilt, and a large amount of underground work done. A new central office equipment was installed in 1906 and 1907.

As indicated, the southern section of West Virginia was rather extensively developed by independent companies before the Bell company started to develop there; but the Bell either by purchase or connecting agreements has utilized their lines. There are now only seven exchanges in which there is duplicate service: Beckley, Ravenswood, Ripley, Spencer, Sutton, Weston, and Buckhannon. This does not include the territory covered by the West Virginia Eastern Telephone company—a sub-licensed company which operates in Randolph, Barbour and Tucker counties which has opposition service over its entire territory and in its three exchanges.

One interesting fact in connection with the telephone situation in this territory is, that each of the following towns have three telephone exchanges: Ripley, Spencer, Ravenswood and Weston. This section of West Virginia is also throughly covered with farmers' line development, the lines being constructed and owned by the farmers.

The eastern panhandle is operated by the Chesapeake and Potomac Telephone company (Bell system). Keyser and Piedmont, which had exchanges previously operating independently, were connected with the

Bell system through a traffic agreement in May, 1901, after which they had the benefits of communication with the outside world. An exchange was established at Harpers Ferry on October 1, 1905 and at Charlestown and Shepherdstown in 1906.

The first "long distance" telephone line to traverse West Virginia was the New York-St. Louis line, built in 1894. In the state of West Virginia it followed the course of the National Pike. In 1906 a line was constructed from Cumberland, Maryland to Parkersburg, following closely the Baltimore and Ohio railroad. In the same year a line was built from Pittsburg to Grafton. In 1902, the Lynchburg, Virginia-Cincinnati, Ohio line was constructed, passing through Charleston and Huntington, West Virginia.

It has been only recently that the telephone has been recognized as a necessity. Until the last few years it was regarded as a luxury; and the subscribers list of the telephone companies included only the wealthier people; but it has become an indispensable adjunct to daily life in both office and home.

Telephone development has by no means reached its zenith in West Virginia. The subscribers lists are constantly growing and the telephone managers by the installation of reserve plants in the larger cities are preparing for enormous growth in the coming years.

Commercial Organizations in West Virginia

By Roy Benton Naylor, Secretary West Virginia Board of Trade.

Commercial organizations have played a large part in the development of West Virginia and the State is well equipped with active and energetic Associations working for the progress and prosperity of different interests and the commonwealth as a whole along the most modern and approved lines. They constitute one of our best assets. They have united various lines of commerce and industry in the State at large and the forces of various communities in compact bodies for the achievement of aims and objects common to all. They have brought together the interests of various sections and have been a potent factor in promoting the sentiment of solidarity and mutual destiny which has proven valuable in the solution of many problems. They have promoted local civic pride and state patriotism which are essential to progress and have stimulated citizens to the unselfish performance of tasks of far-reaching importance to the public good.

The only state organization whose object is the general advancement of the state and whose membership includes business men in all lines of endeavor is the West Virginia Board of Trade which was formed in 1905 at Wheeling and which from the first enlisted the support of many of our leaders in commerce and industry, its past presidents including

Hon. George C. Sturgiss of Morgantown; Hon. Henry G. Davis of Elkins, ex-Governor A. B. Fleming of Fairmont; ex-Governor W. A. MacCorkle of Charleston; Hon. Wm. P. Hubbard of Wheeling; Hon. W. C. McConaughey of Parkersburg; Dr. I. C. White of Morgantown, with the present incumbent Hon. John J. Cornwell of Romney.

The State Board of Trade was originally formed as a combination of local organizations, but not long after its formation, its scope was extended to include individuals, firms and corporations. It now has about twenty organizations as constituent members with over three-hundred individuals, firms and corporations in every section of West Virginia as active members. Its work has proven very valuable to the State in many ways as its scope covers a wide field and many matters of general interest have engaged its attention.

The West Virginia Business Men's Association which was organized in 1910 at Parkersburg is particularly devoted to the interest of retailers and has proven a success from the start. This Association has as its main object the building up of a comprehensive credit system among our retail merchants, but is also devoted to the advancement of legislation and other objects which may effect the interests of all.

Going into the matter of organizations devoted to separate branches of industry, we find the coal interests very well organized in the West Virginia Mining Association, formed in 1907, for the general advancement of the mining industry in West Virginia, and the West Virginia Mining Institute, organized in 1908, with largely the same purposes and aims. These Associations have a large and growing membership and in the short time they have been in existence have done a great deal toward the improvements of West Virginia's leading industry.

Following these, we find other lines of business thoroughly organized in the West Virginia Bankers' Association; the West Virginia Wholesale Grocers' Association; the West Virginia Retail Hardware Association; the West Virginia Pharmaceutical Association, the West Virginia Photographers' Association and the West Virginia Master Plumbers' Association, all holding annual meetings and all working for the up-building of the particular interest by which they are supported. The motion picture men are the latest on the list and expect to perfect a strong organization this year.

The lumber men have been organized at various times but recently have not been active. However, the state is well represented in the national lumbermens' association, known as the Concatenated Order of Hoo-Hoos. This association, despite its peculiar name, is a very useful one and has a membership in West Virginia of between two and three hundred men engaged in the lumber industry.

In a local way, West Virginia is as well supplied with commercial organizations as any state in the Union in proportion to its size and population. These have done a splendid service on broad, unselfish lines for their various communities and thus have contributed their share to the up-building of West Virginia. They have attracted new enterprises involving the investment of millions of dollars; they have improved rail-

road facilities; they have bettered civic conditions in many ways; they have united business interests in many worthy projects; they have promoted the formation of useful organizations for particular purposes; they have advertised the resources and advantages of various communities and have stimulated local civic pride as no other force could do. They adequately reflect the spirit of progress which animates our people and have put into effect many aims and aspirations which could be realized in no other way. These Associations are as follows:

Bluefield Chamber of Commerce; Charleston Chamber of Commerce; Clarksburg Board of Trade; Fairmont Chamber of Commerce; Grafton Board of Trade; Huntington Chamber of Commerce; Keyser Board of Trade; Mannington Board of Trade; Martinsburg Board of Trade; Mogantown Board of Trade; Moundsville Board of Trade; New Martinsville Board of Trade; Parkersburg Board of Commerce; Richwood Board of Trade; St. Albans Board of Trade; Salem Board of Trade; South Branch Board of Trade; Weston Board of Trade; Wheeling Board of Trade and the Williamson Board of Trade.

Besides general organization such as indicated in the list, most of these cities also have retail merchants' associations working for the particular interest of this class of business men, while at Montgomery, Point Pleasant, Wellsburg, Keystone, Hinton and Elkins these associations are doing the work indicated and also that which usually falls to the Board of Trade or Chamber of Commerce.

The largest and most important general commercial organizations are naturally found in the largest cities of the state where there are more men to do things and more money to do them with, and so we have the leading bodies in Bluefield, where the Chamber of Commerce, organized about ten years ago has a large membership; in Charleston, whose Chamber of Commerce was organized in 1899 and has a membership of 512; in Clarksburg whose Board of Trade was incorporated in 1906 and has a membership of over 400; in Fairmont where a Board of Trade was organized in 1902 and later re-organized as a Chamber of Commerce in 1911, with a present membership of approximately 250; in Huntington where the Chamber of Commerce was formed in 1895 with a membership of about 500; in Morgantown where the Board of Trade was organized about five years ago with a membership of 400; in Parkersburg where the Board of Commerce was recently reorganized with a membership of over 500 and in Wheeling where the Board of Trade in 1900 succeeded the Chamber of Commerce formed in 1885 and now has a membership of 650.

The South Branch Board of Trade is the only inter-county organization and combines the business men of Hampshire, Hardy and Grant counties. It was organized in 1811 and has done a good work for this section of West Virginia so appropriately called "The Land Overlooked."

In all of these various local organizations, we find leaders of commerce and industry at the head of affairs and many of our most prominent men are active in their support as, for instance, Senator David E. French is at the head of the Bluefield organization; Col. D. E. Abbott, president of

the Huntington Chamber; ex-Governor A. B. White, one of the most active in the Parkersburg Board; Dr. I. C. White, a leading spirit in the Morgantown association; Hon. John J. Cornwell, the organizer and president of the South Branch Board, and Mr. W. B. Irvine, a leading banker of the State, at the head of the Wheeling organization.

While some main facts have been given about the larger organizations, it is but just to say that many in the smaller towns such as those in Moundsville, Mannington, Williamson, Hinton, Elkins and Weston are well organized and have done some splendid work.

Many of the larger organizations, like the Wholesale Grocers' Association and Huntington Chamber of Commerce have been in existence for many years, but the great majority of them have been formed within the last decade and it is safe to say that the number and membership of the various associations have doubled within ten years. Business men have come to see that in union there is strength and that the most satisfactory results can be accomplished by working as a unit on those questions which affect the interests of all.

Prior to 1900, the advantage and usefulness of commercial organizations was not fully realized, except here and there, but the awakening has come all along the line and with the success which has attended our organizations, it is not too much to predict a doubling of our resources in this regard in this decade.

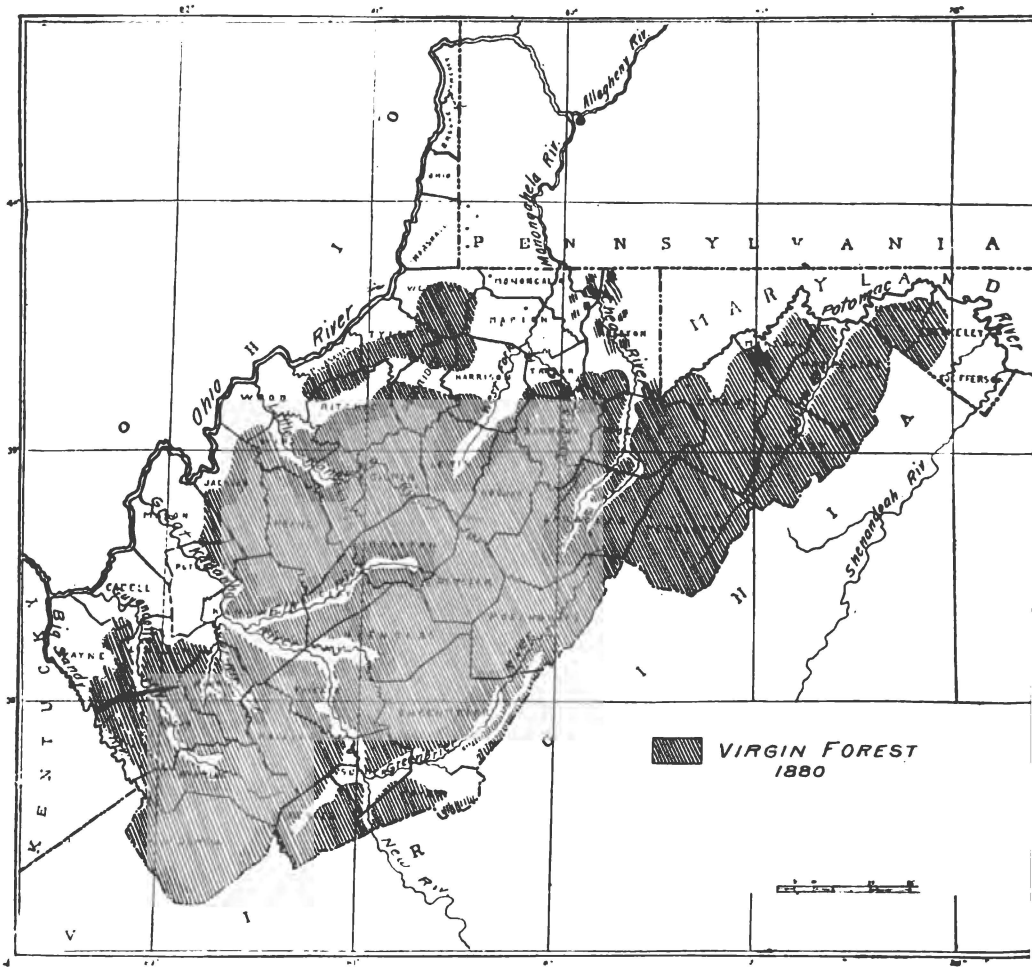
Wheeling, West Virginia,
April 7th, 1913.

The Story of the Forest and Timber Industries

By A. B. Brooks, Agent Plant Industry, U. S. Dept. of Agriculture.

There was a time not many years ago when nearly the whole land area of what is now West Virginia was overspread with a forest of large trees. On the cold mountain ridges and plateaus, in the deep river gorges, and along the banks of the cool mountain streams were the cone-bearing trees,—the hemlock, the pines, the balsam fir, and the red spruce. With these, and covering thousands of acres of cove and hill and river bottom, were the giant oaks and hickories and maples, and the famous yellow poplar and the black walnut, intermingled with numerous other broad-leaf trees, sought in after years for their valuable lumber and fruits. These trees had grown and flourished and reached maturity, like thousands of their ancestors, undisturbed and unused except by the savage races and the wild animals that then lived in this otherwise uninhabited region.

When our forefathers came into this wilderness country and set themselves to the task of building homes and clearing the land for crops of vegetables and grain, they found the forest a storehouse for many of the necessities of life. While some of the trees had to be felled and


PENNSYLVANIA
MARYLAND
Ohio River
Allegheny Riv.
Monongahela Riv.
Potomac River
Shenandoah Riv.
New Riv.
Big Sandy
Kanawha
Elk
Gauley
Cheat
Tygart
Youghiogheny
Monongalia
Marion
Harrison
Taylor
Barbour
Wood
Jackson
Putnam
Cabell
Wayne
Pocahontas
Randolph
Tucker
Grant
Hardy
Pendleton
Jefferson
Berkeley
Morgan
Preston
Ohio
Brooke
Hancock
Wetzel
Tyler
Pleasants
Ritchie
Doddridge
Gilmer
Lewis
Upshur
Braxton
Clay
Nicholas
Webster
Pocahontas
Greenbrier
Pendleton
Hardy
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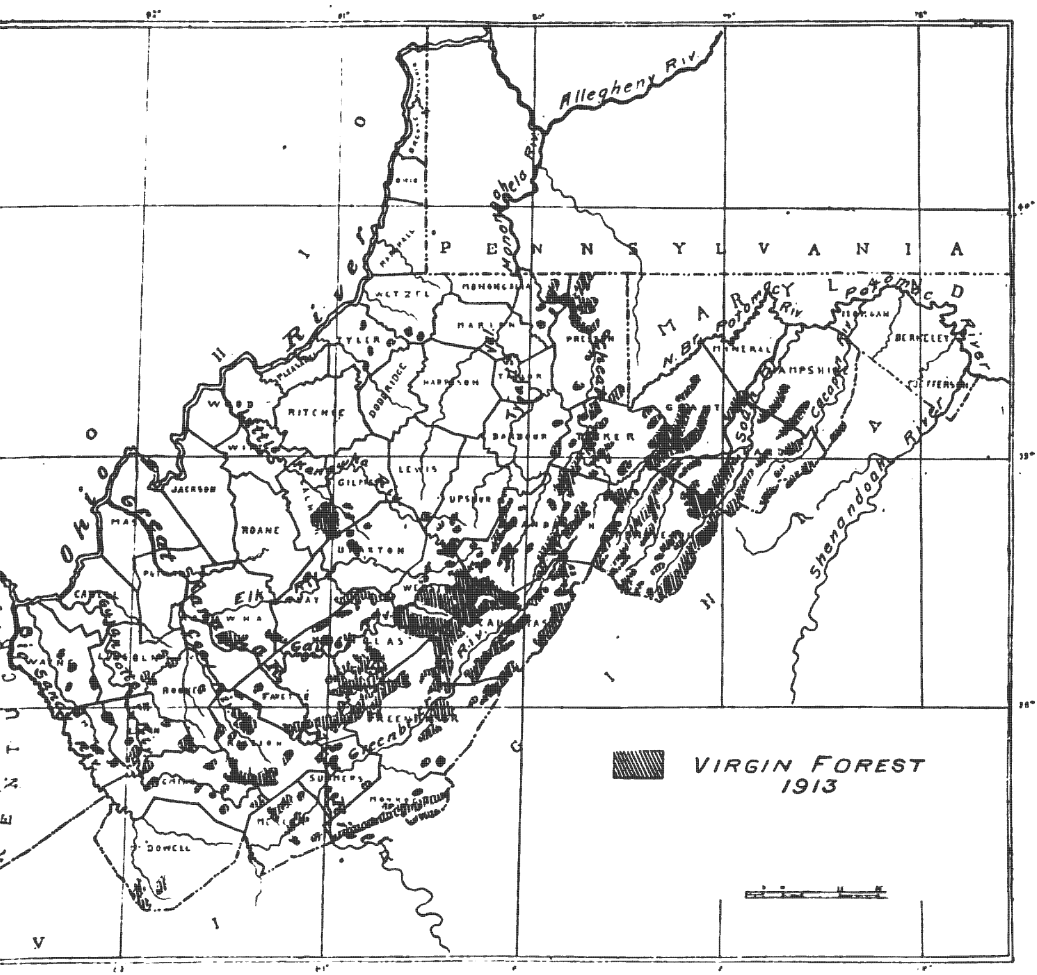


Allegheny Riv.
Monongahela Riv.
PENNSYLVANIA
MARYLAND
Ohio River
Potomac River
N. Br. Potomac Riv.
Shenandoah River
Cacapon Riv.
Elk Riv.
Greenbrier Riv.
Great Kanawha
Little Kanawha
Gauley
Big Sandy Riv.
WETZEL
MONONGALIA
MARION
TYLER
PLEASANTS
DODDRIDGE
HARRISON
WOOD
RITCHIE
BARBOUR
TUCKER
LEWIS
GILMER
UPSHUR
JACKSON
ROANE
BURTON
CABELL
WAYNE
LOGAN
ROANE
FAYETTE
SUMMERS
MONROE
DOWELL
MINERAL
HAMPSHIRE
BERKELEY
JEFFERSON
VIRGIN FOREST
1913

burned, others afforded indispensable materials for the construction of dwellings and the manufacture of rude implements and tools. Thus it was that the products of the forest first came to be utilized and that forest industries were begun with the earliest settlements.

The story of the gradual but marvelous development of the various industries directly dependent upon the products of the forest can be traced through the years in which farms have grown wide from the first small openings and town and cities have sprung up throughout the state.

The remarkable evolution of the devices for the manufacture of lumber is one of the best measures of the development of forest and timber industries. The adz and broad axe and frow, with which the puncheons and boards were shaped for the first log houses, were the forerunners of the whip saw and the old-fashioned water saw mill. The rude, hand-operated device known as a whip saw was carried easily with other belongings of the pioneers and was used principally in the early days before heavy machinery could be brought in. The contrivance is thus described in Kercheval's History of the Valley of Virginia: "The whip saw was about the length of the common mill saw (referring to the saw used in water mills) with a handle at each end transversely fixed to it. The timber intended to be sawed was first squared with a broad axe, and then raised on a scaffold six or seven feet high. Two able-bodied men then took hold of the saw, one standing on top of the log and the other under it." The author of this history adds further on,—"The labor was excessively fatiguing, and about one hundred feet of plank or scantling was considered a good day's work for two hands." Straight-grained yellow poplars and white pines, and other trees with soft and durable wood, were easily found in those days and were always selected as whip saw material. Not a few old residences that were built of whip-sawed lumber are still standing. In Pocahontas county lumber was sawed with a whip saw for McClintic's Hunting House, built at the mouth of Tea Creek in 1880; and it is stated that saws of this kind have been used in Wyoming county, and in some of the adjoining counties of the southern part of the state, within the last ten years.

Whip sawing early gave place, in many sections, to the manufacture of lumber on water-power saw mills. Two types of mills belonging to this class were in existence. The sash saw mill consisted of a straight band of steel properly toothed, and strained taut by means of a frame, or sash, into which it was fitted. The frame was pulled down by a water wheel, which supplied the motive power, and was pulled back, in some cases, by an elastic pole. The muley saw, introduced a little later, was less cumbersome and was capable of more rapid work.

It is not definitely known when or where the first saw mill was built and operated in West Virginia. It is probable, however, that there were a few built by the early settlers who occupied the valley of the Potomac river and its tributaries prior to the year 1755. No records have been examined that confirm or deny this statement but it is reasonably safe to say that there were a dozen rude water saw mills in the territory now occupied by Jefferson, Berkeley, Morgan, Hampshire, Hardy, Grant, and

Pendleton counties as early as 1775, and that the number had increased to five or six times as many by the year 1800. There may have been more at each period. A record dated in the year 1810 states that there were about fifty saw mills running in Berkeley county alone at that time.

Those who left the settlements in the east to take up lands and establish homes west of the Alleghanies had doubtless become familiar with the water saw mill and knew its value, but many of them journeyed such a distance that it was not possible for them to take anything so cumbersome as machinery of this kind. As soon as the roads could be cut through the wilderness, however, among the first things to be hauled over them were the clumsy irons of these mills, which were taken farther west, year after year, until they reached the Ohio river. The dates of the settlements, therefore, nearly coincide with the dates of the beginning of the water saw mill industry. We find that there was a flourishing colony established on the Monongahela river as early as 1758; that there was a settlement containing five thousand people on the Ohio river near Wheeling in 1769; that colonies were established at Parkersburg in 1773, and at Point Pleasant in 1776. During the decade between 1770 and 1780 settlements were begun in a number of places along the Cheat river in Preston and Tucker counties; along the Tygarts Valley river in Randolph county; along the Monongahela and its West Fork and Tygarts Valley branches in the whole region now embraced by the counties of Monongalia, Marion, Taylor, Harrison, Barbour, Lewis and Upshur. During the same period, or slightly earlier in some cases, settlements were established on the Greenbrier river in Pocahontas and Greenbrier counties, and in the plateau and valley lands of Monroe county. Saw mills were brought to the settlements nearest the mountains first, but the dates given above are only a little in advance of the saw mills in any case. In fact, if we were to continue as above, to trace the progressive settlements step by step, from the very first up to the year 1880, we would have a reasonably accurate history of the progress of these mills.

The first saw mill west of the mountains is said to have been built near the town of St. George, in Tucker county by John Minear in the year 1776. This was a sash saw mill and stood on Mill run, a small tributary of Cheat river. Another was built by the McNeals some years after their settlement in southern Pocahontas county in 1765, and another by Valentine Cackley at Millpoint, in the same county, in 1778. The Gazetteer of Virginia and the District of Columbia, written by Joseph Martin, contains one of the first available lists of saw mills in what is now West Virginia. According to this list there were forty or more water mills running in 1835. Probably the most extensive water saw mill operations in the state were conducted on Middle Island creek and its tributaries in Pleasants, Tyler, and Doddridge counties. In Tyler county alone not fewer than twenty-four sash mills were running in this vicinity between the years 1840 and 1880. Some of the mills were in operation day and night in winter, and all sawed choice white and yellow pines for southern markets.

As late as 1863, when West Virginia had its birth as a state, seven-eights of the lumber consumed here and exported was manufactured by water power on the primitive types of saw mills.

The next step in the evolution of sawing devices was the introduction of steam-propelled rotary saw mills that were capable of being hauled from place to place. This type of mill, which is still in use in the state,—numbering over fifteen hundred in present operation—is too familiar to require description. Little is known of the first years of the steam saw mill industry. It would be impossible at this time to obtain full data as to their number and location. Local historians, with one or two exceptions, have remained silent regarding it, and all that can now be learned of the early stages of steam saw milling must be laboriously secured from a few imperfect records and from the older citizens of the state who were lumbermen many years ago. According to Martin's list there were fifteen steam saw mills in operation in the counties that now constitute West Virginia, in 1835. The increase in number of portable mills was not rapid during the first thirty or forty years after their introduction. With the coming of the railroads, however, mills of this kind began to multiply rapidly. New towns that grew up along these roads required a large amount of rough lumber for the hastily-built houses, and it was usually possible to locate mills near by. In 1870 J. H. Diss Bebar wrote: "Along both branches of the Baltimore & Ohio Railroad, from twenty to thirty first-class mills are cutting on an average 3,000 feet of lumber a day." And so it was along practically all other railroads as they were built from time to time. A few came at first and these were soon followed by many others, as mentioned in the quotation above. Just as the old water mills followed closely the first settlements, supplying lumber for floors and ceiling in the log houses and for the construction of the first frame dwellings, so the portable mills followed the later settlements as they were begun along the lines of the railroads.

The introduction of the band saw mill, about thirty years ago, practically revolutionized the lumber industry. The modern plant with its numerous mechanical appliances for the saving of labor and for rapid work, is a marvelous combination of ingeniously-fashioned machinery. The saw itself, as the name implies, is a belt of steel which works over two wheels mounted one above the other in a frame. The band is sometimes toothed on both edges so that a board is cut from the log at both the forward and backward movements of the carriage. The sawing, in the typical West Virginia plant, is usually conducted in the second story of the building. Logs, which are frequently conveyed long distances on trains and deposited in artificial ponds, are drawn up an incline to the mill floor by an endless chain device called the "bull chain." Here the log is scaled and deposited on an inclined platform sloping to the carriage onto which it is rolled and made fast by setting works, consisting of head blocks and dogs, operated by steam and controlled by levers manipulated by men on the carriage. The sawyer controls the movements of the carriage and handles the logs by the use of a device

known as the "nigger" which plunges up from underneath and, striking the log with great force, tosses and turns it to any desired position. Slabs and boards are cut off in rapid succession, the carriage returning to the starting point at a high rate of speed. Mechanical carriers take the refuse and boards as they drop from the saw. The boards are conveyed to the edger saw and, without halting in their course, are carried to the trimmer, which, with its complicated system of levers and drop or lift saws, cuts off the uneven ends and reduces them to standard lengths. From here they are carried into the yard. The sound slabs are cut into proper lengths for lath or shingles or dimension stock, and the poor ones are ground into small pieces and passed with the saw dust into the furnaces. The time consumed in the passage of a log of average size from the pond to the yard and its conversion into lumber seldom exceeds three minutes.

Many of the large plants of the state are equipped with two or three band saws besides additional re-saws, and in some cases logs are squared and taken to gang saws where, with one passage, they are converted into boards. Several of the mills employ day and night shifts running twenty hours out of the twenty-four every working day in the year. The Richwood mill of the Cherry River Boom & Lumber Company—one of the largest operations in the state—cuts 300 thousand feet of lumber every day.

The first band saw mills were built in West Virginia between the years 1880 and 1885. Deveraux Lumber Company's mill built in Charleston in 1881 was probably the first. Two years later J. R. Huffman, the inventor of the band saw, built two large mills at Charleston. The St. Lawrence Boom & Manufacturing Company erected a band mill at Ronceverte in 1884; and the Blackwater Boom & Lumber Company erected one at Davis in 1887. Others of the older mills were those of the Hulings Lumber Company, at Hambleton; Gauley Lumber Company at Camden-on-Gauley; Parkersburg Mill Company, at Parkersburg; and Pardee & Curtin Lumber Company, at Grafton. There are at present eighty-three band saw mills in operation within the state.

During the years when the more primitive types of saw mills were running and continuing in some cases to the present time, were other forest industries of considerable importance. The list of these industries includes the making and floating of flat-boats, the rafting of logs and other timber products, the manufacture of cooperage stock, the hoop pole industry, shingle-making, the telephone and telegraph pole and cross-tie industries, tanning, and others of less importance. In later times the manufacture of pulp and paper has become one of the leading forest industries.

Rafting has been conducted on all the principal rivers of the state except those that are too rough to admit of it. On the Ohio river rafts of logs could be seen as early as 1830; and not far from the same time flat-boats were being made on the Kanawha, the Coal, and the Elk rivers. Most of the flat-boats were loaded with staves and taken to the salt works near Charleston where they were sold. For the past seventy-five years

log rafts and single logs have been taken in large numbers from the forests that border the Guyandotte, the Big Sandy, the Little Kanawha, and other rivers. The hoop pole industry was enormous during the years of the early life of the state. As late as 1880, according to a report of the 10th census, more than three and three-fourths million hoop poles were cut, valued at $146,000. The hoop pole and shingle industries have declined within the past two decades. The cutting of poles and cross-ties, however, as well as the tanning industry, have steadily increased year by year, as the demand has become greater.

The amount of timber cut and used for various purposes prior to 1880 is not known. Much that was cut before the Civil War Period was used for domestic purposes. Some was sold in markets that could be reached by water and a little was shipped on the first railroads. One estimate puts the quantity used at home for buildings purposes, during the whole time before 1880, at 500 million feet. The cut of saw mills during the past thirty years has been about 20 billion feet. This does not take into account the vast quantity of timber cut for poles, cross-ties, tan-bark, pulp and for other minor purposes. The figures below show how rapidly the production has increased during the periods mentioned:

YEAR.	FEET BOARD MEASURE.
1880	180,120,000
1890	301,958,000
1900	778,051,000
1907	1,395,975,000
1909	1,472,942,000

West Virginia ranks first in the production of chestnut and cherry lumber, and thirteenth in the production of all kinds. The number of mills has been steadily increasing until at present there are fifteen hundred and twenty-four.

That the area of original forest in the state has decreased in proportion to the increase in capacity and number of saw mills is a natural and correct inference. The amount of lumber cut on the old water power mills and the amount rafted out, and that used for various other purposes, made only a small beginning on the margin of the great forests of the state. Even as late as the year 1880—as shown by the accompanying map—the great body of the coniferous and hardwood forests of the interior sections had scarcely been touched. At that date only strips of varying widths had been cut along the Ohio river and its larger tributaries in the state, and along the North and South Branches of the Potomac and Shenandoah rivers. But since the coming of the larger mills and building of additional railroads, the area of virgin forest has been reduced to less than one-tenth of its original size.

The forest and timber industries—beginning in a small way with the earliest settlements of the state, and increasing to their present large proportions—have meant more in the way of benefits to the citizens of West Virginia than any other industry except that of farming. All classes of people have been, and still continue to be, the beneficiaries of these forest industries; and only by being deprived of the advantages that come from this source, as is so frequently the case, will the people

come to realize their great dependence upon the things that reach them through this channel.

The forest industries have not only brought capital into the state and afforded employment to thousands of its citizens, but have also been the means of establishing social centers and developing wholesome social customs. Hundreds of small villages and flourishing larger towns of today stand where lumber camps formerly stood, built long ago in dense wooded regions. In these camps a rough but large-hearted, robust, and justice-loving company of young lumbermen—some from the rural homes of the state and others from outside our borders—constituted the first temporary and shifting population of these centers,—a few lingering behind as the first permanent residents. In many instances, where the ownership of large tracts of timber land has fallen into the hands of a single company, the first small operations have soon given place to enormous mills which still furnish employment to the entire population of the prosperous towns that have grown up around them.

Fish and Game

By J. A. Viquesney, Forest, Game and Fish Warden.

The first colonists migrating to America found a land of unbroken forests, teeming with all kinds of game; the coasts and water courses were swarming with water fowls of every description, and every river was alive with beautiful fish.

From the landing of the Pilgrim Fathers down to the present time, the wild game and fish have had an enormous potential value, and have been the main-stay in providing food for the pathfinder, the prospector and the settler as they blazed the way of civilization from the Virginia colonies on the Atlantic to the Golden Gate on the Pacific, and turned this continent from a vast forest, inhabited by the deer, the bear and the bison, into a great country of civilization, dotted with fertile fields, happy homes and industrial development that has been an inspiration to the whole world.

Nowhere in the world has there been such a destruction of wild life as has taken place on the American continent in the past century. No other country has been endowed with such an abundance of wild game as has the United States. It seems that nature lavishly bestowed, upon every acre of our territory, every kind and character of the wild fauna and flora that could be maintained thereon. No pioneer ever pushed so far into the wilderness that he did not find hosts of birds and beasts and millions of fishes awaiting him.

Almost a century before the big game of the Rocky mountains was discovered, the game and fish inhabiting the hills, valleys and streams of West Virginia were being slaughtered to feed the Indian and white man alike.

SCENE ON KNAPP'S CREEK, POCAHONTAS COUNTY.
(Bass Stream.)

LAUREL CREEK, POCAHONTAS COUNTY.
(Typical Trout Stream.)

The large game in West Virginia has all been exterminated except a limited number of Virginia white-tail deer and black bear. The Elk or Eastern Wapiti have not been seen in our state since 1845, at which time a herd of seven of these animals was seen in Pocahontas county, near the place where the town of Durbin is now located. However, within the past year sixty-five head of these animals have been brought into this state, from the state of Wyoming, by the Allegheny Sportsmen's Association, and the recent session of the Legislaure having made it a felony to kill one of these animals for a period of fifteen years, it is quite certain that they will again become plentiful in West Virginia.

The bison or buffalo once roamed in large herds over our state, the greatest number of them being found along the Ohio and Kanawha rivers. The last buffalo seen were a cow and calf in Webster county in the year 1825. A few head of buffalo will be brought to West Virginia during the present year but they will be kept in captivity as it is not deemed expedient to attempt to propagate them from a game standpoint.

The smaller game animals and birds are yet reasonably plentiful, and under protection and care will increase rather than diminish.

West Virginia has been called the "birth place of rivers." These rivers taking their rise in the lofty mountain peaks and wending their way through the primeval forests to the larger streams that ultimately reach the Atlantic Ocean and the Gulf of Merico, afford scenery that is not surpassed in the United States, and offer some of the most delightful fishing places in the whole world.

Over one hundred species of fish are found in West Virginia waters, among them some of the most valuable and finest game and food fishes found inhabitating the waters of the United States. The large and small-mouth black bass, and the brook and rainbow trout are special kinds that delight the fisherman's heart, while the principal food fishes are the wall-eyed pike, blue cat, mud cat, channel cat, rock bass, white perch and various kinds of the sucker family.

For some years the great industrial developments in the state wrought great damage to our fish, but many of the beautiful mountain streams, where lumbering operations have ceased, are now returning to their primitive condition, and fish are becoming more plentiful. In the industrial centers of the state, especially where coal is mined extensively, it is not possible to propagate fish with any degree of certainty, for the reason that they will not thrive, nor even live, in the highly polluted waters, but most of our streams are free from pollution, and with proper re-stocking and care can be made as fine fishing streams as can be found anywhere.

Game and fish laws are older than the state of West Virginia. In the year 1699, or more than two hundred years ago, the state of Virginia enacted a law restricting the hunting of deer in certain ways. In Chapter 101 of the Virginia Code of 1849 we find considerable legislation concerning certain kinds of game, but it remained for our own state in the year 1869 to pass the first law enacted by any state protecting all

kinds of insectiverous birds, except a few that were regarded as injurious.

While this law remained on our statute books for nearly half a century there was no organized effort made to enforce its provisions and it was a dead letter, and the boy who could succeed in robbing the greatest number of birds nests, and who could bring home the largest and best assorted string of beads made from the shells of bird eggs was denominated the hero of the community and was likely to receive special mention by the school teacher, the preacher and even in his father's will.

No attention whatever was paid to the protection of fish and game until the year 1897, when the legislature created the office of fish and game warden and materially strengthened the law relating to these subjects. Without any appropriation to provide for deputy service to properly enforce the law, the destruction of our game and fish went ruthlessly on, and with the rapid development of our state bringing in a class of individuals who did not hesitate to dynamite our streams and kill without distinction all living wild birds or animals that wore hair or feathers, it became necessary for the legislature of 1909 to enact a more up-to-date law in order to save from annihilation our remnant of game, fish and birds.

By this law it was made a felony to dynamite fish; the sale and shipment of game was prohibited; it made it unlawful to kill doe at any time; a resident license of $1.00, and a non-resident license of $15.00 was charged, which brought in a revenue of more than $20,000.00 per year and would have been sufficient to restock and protect the fish and game, and would have brought West Virginia to the forefront of the best game and fish states of the Union.

This law being a drastic departure from the old law created some dissatisfaction among the class of people who deemed it their constitutional right to shoot when, where and what they pleased, without restriction, of all of the wild creatures of the earth, and the legislature of 1911, fulfilling their political promises made from stump and platform, repealed the resident hunters license and failed to even appropriate the $40,000 that had been raised during the two years under the license system.

The legislature of 1913, while it failed to make some needed amendments to our present laws, very generously appropriated the sum of $25,000.00 from the fund known as the "Forest, Game and Fish Protective Fund," raised by the sale of hunters' licenses, and will thus make it possible during the years 1913-14 to start a system of restocking our fields, forests and streams which will demonstrate the possibilities of increasing the fish and game in West Virginia. If succeeding legislatures will carry out this policy of appropriating sufficient money to aid in the propagation of fish and game, and will inaugurate a salaried deputy system of wardens, in a short time the change that will appear will be an agreeable surprise to every citizen of the state.

Many states are reaping great benefits from recreation seekers who

love the haunts of the wilds. West Virginia with her picturesque scenery, beautiful mountains and streams, and healthful climate furnishes a splendid resort for all those in quest of rest and recreation, and nothing is more desirable than a stroll along some of our crystal streams in search of the speckled trout or gamy bass, or a hunting camp on some mountain crest where the foot of the white man has seldom trod, searching for the ruffed grouse, the wild turkey or the fleet footed deer.

A better sentiment for fish and game protection pervades the air. Where ten years ago you found one sportsman or fisherman you now find twenty.

The farmer no longer regards the robin or the bob-white as a pest on his farm, but accords them a welcome, second only to his children. The game and fish of our state belong to the people as a whole and not to any one class. It is ours to use but not to destroy. It is confidently believed that under our present system of protection, with sufficient funds to restock depleted territory, that our game and fish will double in number and value within the next five years.

Development of Agriculture in West Vfrginia

By Professor T. C. Atkeson, College of Agriculture, W. Va. University.

West Virginia as a part of Virginia in earlier days and later as a separate state, developed a citizenship and a civilization peculiar to itself, largely influenced and dominated by its rugged environment. "Through all its earlier history Virginia had been noted for its intense loyalty to the Stuarts and its hatred of every element of reform." All the feudal restrictions and abuses of the mother country had been brought over to Virginia by its early settlers and industriously fostered along with the institution of human slavery. Governor Berkeley is reported to have boasted in 1671, that the colony had neither printing presses, colleges nor schools. The gentry alone controlled the politics and managed the finances of the colony.

"The ruling class in Virginia were the planters. They were often cultivated and intelligent men who had been educated in English universities or in the best schools of their native lands. Their possessions were immense, and had usually come to them from their ancestors. Entails prevented any division of the family property, and it was a common complaint at the time that all the land of Virginia was held by a few hands. Mechanical, agricultural, or commercial pursuits were forbidden by customs of the planting class. It was thought beneath a member of the great families to engage in trade, and Scotch emigrants and foreign adventurers pursued a gainful traffic, engrossing the wealth of the country, while the landowner slumbered in indolence and fell into poverty

on his ancestral estate. The towns of Virginia were small and wretched, fever-stricken and neglected. The wealth of the ruling families was wasted in building immense mansions in the solitude of their plantations, where they emulated the splendors of the English country-seats, and exercised a liberal hospitality."

Under these conditions there grew up a non-land-owning class, who drifted about from place to place, and while the door of social equality with the planter class was closed to them, they developed a rugged character and spirit of unyielding courage, which following the revolution led them into the hardships of a pioneer life in the rougher section of the state. Following the revolution and with the creation of the state of Virginia, entails were abolished and the old colonial oligarchy passed away forever.

As the new nation took on new growth and life two classes of Virginians crossed the Alleghenies, the younger and more adventurous sons of tidewater Virginia. From North Carolina there came another stream of tide water Virginia. From North Carolina there came another stream of hardy pioneers into western Virginia, as all that part of the state west of the Blue Ridge was called. From these three lines of ancestry the great majority of the natives of West Virginia descended.

Many of these pioneer settlers were hunters and fishermen and all of them farmers in a more or less limited way. In the rougher sections cabins were built along the mountain streams and near springs which furnished a good supply of pure water. A few acres were cleared of the heavy timber and sufficient grain grown for the year's bread supply, while the chase was depended upon almost wholly for the meat supply. The crudest home-made instruments were used and domestic manufacture was wholly depended upon for clothing made from wool grown upon sheep that ranged the hills, and fields of flax that grew in the valleys.

In a few of the better agricultural sections of the state, where the land had been acquired by the more prominent families of Virginia through military grants and otherwise, agriculture was highly developed for that early day. Along with the development of the whole of the beautiful and fertile Shenandoah valley, the highest state of grain and other farm crop production was found in Jefferson and part of Berkeley counties. The South Branch valley of the Potomac was early settled and a progressive and thrifty agriculture developed on the fertile lands about Moorefield, and we are creditably informed that some of the earliest importations of short horn cattle found their way into that favored section, which at one time was largely devoted to the production of a superior class of beef cattle, which were driven to Baltimore and other eastern cities for market.

The splendid blue grass lands of Greenbrier and Monroe counties became famous for high class saddle and other horses at an early day, and short horn cattle could be seen grazing on a thousand hills.

Another line of settlement came into the northern and central part of the state by way of the Potomac, and the blue grass lands of Lewis and Harrison counties were devoted to grazing purposes, and the production

of high class cattle at an early day. A string of prosperous settlers stretched along the Ohio river from Wheeling to the Big Sandy and up the valley of the Great Kanawha and other streams that empty into the Ohio, and the products of their fertile bottom lands found their way to New Orleans by being floated down the rivers long before the mighty steam boat had plowed those western waters.

West Virginia contains an area of about 24,000 square miles, or 15,000.000 acres. Of this total area, there are about 5,000,000 acres that cannot be plowed, and about as much more that should not be plowed, or if plowed at all, it should be very seldom, which leaves only about 5,000,000 acres that may be said to be fairly well adapted to profitable cultivation in farm crops of any kind. These figures are, of course, only estimates but they are accurate enough for all practical purposes. The area that may be profitably cultivated will decrease rather than increase as time goes on. Much of the steeper land now cultivated will have to be abandoned and devoted to pasturage or some other purpose that will stay the destroying hand of erosion which does its deadly work so rapidly on our cultivated hill sides.

West Virginia probably has the most broken surface of any state in the Union, with every possible exposure, and with all kinds of elevations, ranging from less than 300 feet at Harpers Ferry and 500 at the mouth of the Big Sandy to nearly 5000 feet on the highest mountain tops. A great variety of soil is found, and in a virgin state is nearly always fertile. The exceptions are found on the southwest hillsides in the sandstone sections of the state.

The varying elevation, temperature, wind and rain-fall affect the climate, which is quite as variable as the surface of the state. "The mean annual temperature varies from 48 degrees in the upland counties to 56 degrees in the southwestern counties. The average for the state is 52 degrees. The temperature for the summer months is from 70 to 75 degrees; for the winter the average is from 30 to 35 degrees. Temperature above 100 degrees and below minus 15 degrees are unusual. The first killing frost occurs about the middle of October, and the last about the middle of April.

The direction of the wind is from the southwest, but occasionally from the northwest and rarely from the east. Hurricanes are almost unknown in the state.

The rainfall varies from 35 inches to 50 inches in a year. The rainfall is the least in the Ohio, Potomac and New River valleys. It is the greatest on the western slopes of the mountains. The higher mountain counties have from five to six feet of snowfall in the winter, while the lower valley have not over two feet.

The climate is agreeable and healthful. It is favorable to the growth of many kinds of grain crops, fruits, tobacco and grass."

For more than a hundred years the tide of emigration westward went through or around West Virginia. As late as 1860 it was not an unusual or infrequent sight to see the "old time moving wagon," with its white canvas cover slowly dragging its way along the Kanawha valley on its

way from Eastern Virginia or North Carolina to Ohio or farther west. drawn by a dilapidated pair of horses with a "scrub" cow tied to the rear end of the wagon. Many a time has the writer seen this spectacle with every shade of variation. As late as 1850 much of the bottom land along the Ohio and Kanawha rivers was covered with primeval forests, and as the woodman's ax preceded the plow the most magnificent walnut, oak and poplar trees were chopped down and rolled into the rivers or piled into great log heaps and burned. The timber destroyed and wasted because there was no market for it, if standing on the land now, would pay for it several times over. But the farmers of that day could not raise corn and wheat and other crops under the trees, so the trees had to go, and what would now seem an enormous waste was the only thing the pioneer could do. He could not eat trees, and so the clearing of land went on from year to year until the forest was driven back from the most level and fertile lands. In the effort to enlarge our agricultural area, many acres were cleared that should have been left protected from erosion by nature's covering.

Down to 1860 fully eighty per cent of the population were on the farms of the state. There were no large cities in the state, and factories of any kind were an unknown quantity. The transportation facilities were of the crudest kind. The ox wagon and the stage coach went their weary, jostling way over our mountain roads, and the "keel" and "flat" boats drifted with the current down the rivers never to return, and the steersmen walked much of the way on their return from New Orleans, if indeed they ever returned. Commerce was almost unknown and neighborhood traffic was the limit of trade. About the only agricultural products that found their way to the outside world, except such as was grown along the rivers, were cattle, horses, sheep and hogs and they traveled out on their own feet. As late as 1850 thousands of hogs were driven from the Ohio and Kanawha valleys across the mountains to Richmond, while most of the cattle went in the same way to Baltimore and other eastern cities.

The lands of the once fertile Kanawha valley were impoverished raising corn to feed hogs which were driven to Richmond or later shipped by boat to Cincinnati. The hog business is now almost abandoned in that valley, but the swine blight is plainly visible on every hand from which it will take many years of scientific farming to recover.

The Baltimore and Ohio railroad was completed through to the Ohio river at Wheeling in 1853, which resulted in largely increased development of the country traversed by it, and agriculture throughout all the northern counties of the state took on new activity. Some four years later the Parkersburg branch of the Baltimore and Ohio railroad was put through, and put new life into the agricultural development along its line, and up and down the Ohio valley. No other railroad crossed the state until the Chesapeake and Ohio was completed from the east to Huntington in 1873.

Previous to 1850 practically no improvement was made in mechanical appliances for agriculture. Wooden mouldboard plows were not un-

common, and the crudest kind of iron plows were in common use among the most progressive farmers. Up to the time of the civil war no drills or other implements for planting wheat or corn were known in the state, and all of the implements of tillage were made in the local blacksmith shops and attached to wooden stocks made by the farmers themselves. All plows, harrows, rollers, mattocks, axes, rakes and hoes except the turning plow were of domestic manufacture.

During the civil war, when most of the able bodied men were at the front and farm help very scare, there was introduced by some ingenious farmer a home-made double plow, the "bull tongue" plows running about 15 inches apart and throwing the soil into the row where the corn had been dropped by hand, and covering it effectively. By this means one man and a horse could do the work of three men, covering the corn with hoes, which up to this time had been the universal practice.

This labor-saving contrivance was heralded with great joy. Well do I remember how my mother and I dropped the corn, taking row about and keeping up with one horse and shovel plow, while my father followed with his new fangled "corn coverer."

The improvement for harvesting has been much greater than for either tillage or planting. Previous to 1850 the cradle, scythe, and sickle were the universal tools for cutting small grain and grass. There are many men still living in this state who saw wheat cut with a sickle, if they did not use the sickle themselves. The writer saw in operation one of the very first reapers ever brought into the state. It was drawn by a yoke of oxen. The cut wheat fell on a crude wooden platform and was raked off into gavels or bundles with a home made wooden rake handled by a man walking behind the machine. The history of the development of the modern harvester reads like a romance, and its perfection has done more toward feeding the world than all the chemical and biological sciences combined.

Thrashing machines were unknown in West Virginia as late as 1840, and their general introduction did not take place before 1850. The older men now living in the state saw the wheat crop thrashed with a flail or trodden out by horses, and separated from the chaff by a home made "fanning mill" operated by man power. The first horse power thrashing machines did not separate the grain from the chaff and they were known as "chaff pilers" because the chaff and grain went out into the same pile to be separated by the hand power fanning mill. Eight to twelve bushels per day was considered a good average for a man to thrash with a flail. Thrashing machines were rapidly improved and the last fifty years have seen them reach practical perfection. Horses were the universal power until quite recently. Now steam power and other mechanical powers are extensively used for threshing and other farm operations. Much as may be claimed for modern agricultural science, it must be borne in mind that mechanical invention has made modern agriculture possible. "It is the aid of mechanical invention, including the means of transporation, that has made the development of American agriculture possible. The early farmers on the fertile lands of West Virginia like those on the humus-filled prairie

soils of the central west, believed that their lands were inexhaustable, but fifty years of cropping has shown the fallacy of such an idea. Until recent years, practically no effort was made to save and apply manure.

From 1840 to 1860 the best farmers of the state along the river valleys and most productive uplands had developed a high state of cultivation. Agriculture as an art had reached nearly as high a point fifty years ago as it occupies today, but agriculture as a science was unknown. Many of the most prosperous farmers of the state were slave owners, and labor was abundant and cheap. The population of the state was composed almost wholly of the descendants of the pioneers from Virginia. The rankest provincialism existed everywhere and more or less class and caste distinction had come across the Blue Ridge.

Then came the election of Lincoln in 1860 followed by a winter of turmoil and forebodings of the great fratricidal strife that was to break upon the country with the coming of the spring buds and flowers. Agriculture along with the other industries of the state was demoralized. The old-time strife and jealousy between the eastern and western sides of the states began to manifest itself. The commerce of western Virginia, such as it was, had long been slipping down the slopes of the hills and streams toward the Ohio river. Politically, socially and economically the people on the western slopes of the Alleghenies had little in common with their ancestors on the other side of the mountains.

In 1861 Virginia seceded from the Union, while a majority of the people in the western counties were opposed to secession. The state hung across the backbone of the mountain until it broke in two in the midst of war alarms, and the state of West Virginia was cut out of Virginia and admitted into the Union on June 20th, 1863, with a population of 376,000 people, less than 25 per cent of the state's population today.

Agriculture remained at a stand still until the close of the war in the spring of 1865. The soldiers of both armies returned to their homes. The institution of slavery was gone, but many of the farm trained negroes remained on the land. Labor was once more abundant. New life thrilled the nerves of the hardy mountaineers and agriculture soon took on an activity which it had never known before. Improved farm machinery began to be introduced and pure bred animals of every kind were displacing the "natives" and "scrubs" of the previous years. Agriculture was more prosperous than ever before. The currency was inflated and prices were high, and everybody paid off his old debts with a dollar worth less than fifty cents, which by government edict must be accepted at par. It was a bad time to go into debt but the best time the state has ever known to get out of debt.

Then came the financial period of 1873 which paralyzed agriculture as well as other industries. The Chesapeake and Ohio railroad was completed to the Ohio with western connection and train loads of cheap corn and other agricultural products came into the state from the

fertile fields of the boundless west, and West Virginia agriculture got a jolt from which it has not yet fully recovered.

Up to this time modern agricultural science played no part in our farm operations. "That soils became exhausted by cropping and that the exhaustion could be checked by manuring, were facts well enough known from antiquity; the philosophical reason why was left for agricultural chemistry to discover. So soon as chemical analysis became established on a reasonably sure foundation, and chemistry began to assume the character of an exact science, practical applications to agriculture began to follow. Chemical experiments relating to the art had been made earlier by Arthur Young and others, but agricultural chemistry as the science we now know it, began with Sir Humphrey Davy. He first lectured before the English Board of Agriculture in 1802. He experimented on guano, phosphates, and other various manures, and analyzed them. He lectured again before the Board of Agriculture in 1812, and these lectures furnished the basis of his Elements of Agricultural Chemistry, published in 1813. This work was extensively read, and was translated and printed in several languages. During the next thirty years there were numerous experimentors, and it was a period rich in discoveries in chemistry. Sprengle made many analyses of the ashes of plants about 1832, and then came the works of Johnston, Mulder, and others; but it was left to Liebig to bring order out of the great mass of experiment and theory which had accumulated, and to really place agricultural chemistry on its present foundation. His Chemistry in its Applications to Agriculture and Physiology appeared in 1840, and soon after Boussingault published his Economic Rurale. Johnston published his Lectures on the Applications of Chemistry and Geology to Agriculture in 1844, since which time works on this department of Science have been particularly numerous. While the science has had most of its development in Europe, America has not been without its workers, and the later writings of Professor Johnston have been republished in Europe in the English, German, Swedish and Russion languages.

"The art of manuring" was a favorite theme in olden times, and it was an art brought to high perfection; but it followed experience only. With the aid of chemistry the art assumed the features of a science. Manures known before were used to better advantage, rare ones brought into greater prominence, and new ones devised.

Agriculture in West Virginia had a dull time of it from 1873 to 1878, in which latter year the agricultural experiment stations were established throughout the country. Science was beginning to receive some practical application. Previous to 1880 practically no commercial fertilizer had been used in West Virginia, but its use has been rapidly on the increase ever since until its annual use probably totals two million dollars. Fruit growing has recently been largely developed and the most up-to-date methods of orchard management have been introduced.

Corn is the largest crop produced in the state, and while it is grown in every county in the state, it produces most abundantly on the river bottom lands and the most fertile uplands below 1500 above sea level.

The wheat crop which has largely decreased in recent years, is mainly grown along the wider valleys and on the great limestone hills, where the soil seems to be especially adapted to profitable production of that great cereal. Buckwheat is largely grown in the mountain counties, and only three states in the Union produce more buckwheat than West Virginia. Oats are grown more or less throughout the state, but they do best in the northern counties and on the higher elevations. Potatoes are a profitable crop in many sections and are grown to some extent in every county in the state.

Timothy, blue grass, red top, the clovers, orchard grass, and many others grasses grow luxuriantly throughout the state. The limestone sections are especially adapted to the growth of blue grass, and it is from these great grazing lands that fat cattle find their way into the export market without other feed. These hill pastures are especially adapted to sheep production, and must ultimately be much more largely utilized for that purpose than they are now.

The statistics given by the Department of Agriculture for 1911, the latest available, give the agricultural products of the state as follows:

AGRICULTURAL PRODUCTS—CROP OF 1911.

	Yield		Value.
Corn	18,170,000	bushels	$13,991,000
Wheat	2,737,000	"	2,792,000
Oats	2,420,000	"	1,355,000
Rye	187,000	"	168,000
Buckwheat	864,000	"	734,000
Potatoes	1,980,000	"	2,059,000
Hay	428,000	tons	8,560,000
Tobacco	11,250,000	pounds	900,000

Notwithstanding this large production, the state annually imports many million dollars worth of agricultural products more than it produces and the probabilities now are that this will long remain an importing state, as the development of its mining and manufacturing industries with the incidental increase of population will consume more agricultural products that the state is likely to produce, which insures the best possible market at home for farm, garden, orchard, poultry and dairy products. All these lines of production should be largely increased.

The pasture lands of the state are very extensive and stock growing has always been an important industry, but the number of cattle and sheep should be largely increased. The number of animals in the state, January first, 1912 was as follows:

FARM ANIMALS AND THEIR VALUE, JANUARY 1, 1912.

	Number.	Value.
Cattle	561,000	$15,089,000
Horses	182,000	20,566,000
Mules	12,000	1,464,000
Swine	363,000	2,432,000
Sheep	838,000	3,268,000

The leading crops of the state for 1909, ranked in the order of valuation, were: Corn, $11,907,000; hay and forage, $7,493,000; wheat, $2,697,000; potatoes, $2,279,000; tobacco, $1,923,000; and oats, $912,000. Corn during the 10 years ending with 1909 decreased 48,335 acres, or 6.7 per cent. Starting with 565,785 acres in 1879, corn advanced to 592,763 in 1889, and to 724,646 in 1899, but fell to 676,311 in 1909. The total yield in 1909 was 17,119,097 bushels; the average yield per acre, 25 bushels; the average value per acre, $17.60. Hay and forage

increased 106,965 acres, or 17.8 per cent, between 1899 and 1909. From 366,328 acres in 1879, hay and forage rose to 579,129 in 1889, to 601,935 in 1899, and finally to 708,900 in 1909. The total yield in 1909 was 639,104 tons: the average yield per acre, 0.9 tons; the average value per acre, $10.60. Wheat in the decade from 1899 to 1909 decreased 238,613 acres, or 53.3 per cent. From 349,068 acres in 1879, wheat dropped to 349,016 in 1889, rose to 447,928 in 1899, the maximum acerage for the period, but fell to 209,315 in 1909. The total yield in 1909 was 2,575,996 bushels, of which 2,569,633 bushels was winter wheat. The average yield per acre was 12 bushels; the average value per acre, $12.90. From 1899 to 1909 the acreage devoted to potatoes increased 12,698, or 42.2 per cent. From 27,465 acres in 1889, there was an increase to 30,123 in 1899, and again to 42,821 in 1909. The total yield in 1909 was 4,077,066 bushels; the average yield per acre, 95 bushels; the average value per acre, $53.20. The increase in tobacco during the decade closing with 1909 was 12,799 acres, or 249.5 per cent. From 1879, when 4,071 acres were harvested, tobacco increased to 4,647 in 1889, to 5.129 in 1899, and to 17,928 in 1909. Hence, since 1879 tobacco has increased about three and two-fifths times. The aggregate yield in 1909 was 14,356,400 pounds; the average yield per acre, 801 pounds; the average value per acre, $107.30. From 1899 to 1909 there was an increase in oats of 4,325 acres, or 4.3 per cent. Starting with 126,931 acres in 1879, oats increased to 180,815 in 1889, decreased to 99,433 in 1899, and again rose to 103,758 in 1909. The aggregate yield in 1909 was 1,728,806 bushels; the average yield per acre, 17 bushels, the average value per acre, $8.80.

The cereals had an aggregate acreage in 1909 of 1,038,931 acres, as compared to 1,307,428 in 1899, a decrease of 268,497 acres, or 20.5 per cent. Of the cereals, corn ranked first, not only in acreage but also in value, having about three-fifths and three-fourths, respectively, of their total acreage and total value. Wheat was second in acreage and value, while oats stood third. Corn showed the highest average value per acre among the cereals; rye, the lowest. The average value per acre of the cereals was $15.40, about one and a half times that of hay and forage. Among the hay and forage crops, "Timothy alone" ranked first in acreage and value, comprising about three-sevenths the total acreage and total value. "Timothy and clover mixed" was a close competitor both in acreage and value for first place, while "Other tame or cultivated grasses" stood third. The value of hay and forage was about one-half that of the combined cereals.

The following table presents the statistics of the leading corps and of certain minor crops for the year 1909.

CROP	Farms reporting	Acres harvested	QUANTITY Amount	QUANTITY Unit	Value
CEREALS, total	.....	1,038,931	22,116,677	Bushels	$15,997,700
Corn	83,028	676,311	17,119,097	...do...	11,907,261
Oats	22,412	103,758	1,728,806	...do...	912,388
Wheat, total	.....	209,315	2,575,996	...do...	2,697,141
Common winter	22,267	208,826	2,569,633	...do...	2,690,872
Common spring	68	393	4,690	...do...	4,602
Durum or macaroni	12	96	1,673	...do...	1,667
Emmer and speit	20	111	1,558	...do...	1,515
Barley	119	408	8,407	...do...	5,640
Buckwheat	9,028	33,323	533,670	...do...	351,171
Rye	2,774	15,679	148,676	...do...	122,258
Kafir corn and milo maize	16	26	467	...do...	326
OTHER GRAINS AND SEEDS:					
Flaxseed	7	.....	28	...do...	55
Clover seed	65	.....	602	...do...	5,149
Millet seed	1	.....	2	...do...	5
Timothy Seed	201	446	993	...do...	2,252
Other tame grass seed	99	.....	1,048	...do...	1,320
Dry edible beans	8,626	8,111	39,794	...do...	81,049
Dry peas	93	232	1,490	...do...	3,312
Peanuts	21	.....	64	...do...	168
HAY AND FORAGE, total	61,864	708,900	639,104	Tons	7,492,747
Timothy alone	29,682	308,814	278,074	...do...	3,404,456
Timothy and clover mixed	24,327	281,794	249,086	...do...	3,001,535
Clover alone	1,217	6,661	6,514	...do...	75,863
Alfalfa	179	696	1,406	...do...	17,932
Millet or Hungarian grass	2,580	7,758	8,906	...do...	110,749
Other tame or cultivated grasses	7,242	82,607	66,994	...do...	707,627
Wild, salt, or prairie grasses	538	5,495	4,051	...do...	36,690
Grains cut green	830	4,191	6,837	...do...	63,493
Coarse forage	1,864	10,876	16,269	...do...	73,671
Root forage	24	8	67	...do...	731
SUNDRY CROPS:					
Potatoes	81,297	42,821	4,077,066	Bushels	2,278,638
Sweet potatoes and yams	15,632	2,079	215,582	...do...	170,086
Tobacco	9,299	17,928	14,356,400	Pounds	1,923,180
Cotton	2	.....	75	...do...	14
Hops	27	.....	257	...do...	52
Broom corn	397	45	30,456	...do...	3,229
Ginseng	5	.....	87	...do...	460
Ginseng seed	1	.....	.....	Bushels	225
Sunflower seed	1	.....	41	...do...	50

The values of the various kinds of domestic animals and of poultry and bees, as reported at the censuses of 1910 and 1900, and the changes in such values, are shown in the following table:

KIND	1910 (April 15) Value	1910 Per cent distribution	1900 (June 1) Value	1900 Per cent distribution	INCREASE Amount	INCREASE Per cent.
Total	$43,336,073	100.0	$30,571,259	100.0	$12,764,814	41.8
Cattle	15,860,764	36.6	14,058,427	46.0	1,802,337	12.8
Horses and colts	18,583,381	42.9	10,376,550	33.9	8,206,831	79.1
Mules and mule colts	1,339,760	3.1	725,134	2.4	614,626	84.8
Asses and bruros	25,556	0.1	15,234		10,322	67.8
Swine	2,087,392	4.8	1,389,808	4.5	697,584	50.2
Sheep and lambs	3,400,901	7.8	2,664,556	8.7	736,345	27.6
Goats and kids	20,682		2,123		18,559	874.2
Poultry	1,628,700	3.8	963,805	3.2	664,892	69.0
Bees	388,937	0.9	375,622	1.2	13,315	3.5

During the decade domestic animals, poultry, and bees combined increased in value $12,765,000, or 41.8 per cent. All classes increased, but did so in widely different degrees. The greatest change occurred in the total value of horses and colts, nearly two-thirds of the whole gain being in this class, which shows an increase of $8,207,000, or 79.1 per cent. The value of cattle increased $1,802,000, or 12.8 per cent. Swine show an increase of $698,000, or 50.2 per cent, and the total value of sheep and lambs increased $736,000, or 27.6 per cent.

The following table summarizes the statistics of domestic animals for the state, recorded as of April 15, 1910. Cattle and sheep are divided into age and sex groups, while horses, mules, and swine are presented by age groups only.

AGE AND SEX GROUP.	Farms Reporting		Animals		
	Number.	Per cent of all Farms	Number	Value	Average value
Total	92,179	95.3	.....	$ 41,318,436	.....
CATTLE	88,759	91.8	620,288	15,860,764	.....
Dairy cows (cows and heifers kept for milk, born before Jan. 1, 1909)	86,504	89.5	239,539	7,563,400	$ 31.57
Other cows (cows and heifers not kept for milk, born before Jan. 1, 1909)	20,215	21.2	63,740	1,544,213	24.23
Heifers born in 1909	34,890	36.1	75,503	1,123,158	14.88
Calves born after Jan. 1, 1910	35,449	36.7	59,518	422,136	7.09
Steers and bulls born in 1909	22,400	23.2	69,602	1,246,389	17.91
Steers and bulls born before Jan. 1, 1909	14,851	15.4	112,386	3,961,468	35.25
HORSES AND COLTS	70,777	73.2	179,991	18,583,381	.....
Mares, stallions, and geldings born before Jan. 1, 1909	70,125	72.5	159,557	17,419,881	109.18
Colts born in 1909	13,067	13.5	16,973	1,047,242	61.70
Colts born after Jan. 1, 1910	3,028	3.1	3,461	116,258	33.59
MULES AND MULE COLTS	6,629	6.9	11,717	1,339,760	.....
Mules born before Jan. 1, 1909	6,177	6.4	10,800	1,278,071	118.34
Mule colts born in 1909	539	0.6	777	56,018	72.10
Mule colts born after Jan. 1, 1910	115	0.1	140	5,671	40.51
ASSES AND BURROS (all ages)	124	0.1	160	25,556	159.73
SWINE	66,884	69.5	328,188	2,087,392	.....
Hogs and pigs born before Jan. 1, 1910	61,765	63.9	211,463	1,779,050	8.41
Pigs born after Jan. 1, 1910	21,727	22.5	116,725	308,342	2.64
SHEEP AND LAMBS	26,179	27.1	910,360	3,400,901	.....
Ewes, born before Jan. 1, 1910	25,524	26.4	499,064	2,410,151	4.83
Rams and wethers born before Jan. 1, 1910	13,273	13.7	67,888	314,500	4.63
Lambs born after Jan. 1, 1910	22,049	22.8	343,408	676,250	1.97
GOATS AND KIDS (all ages)	385	0.4	5,748	20,682	3.60

The agricultural possibilities of West Virginia have hardly been touched, but to attain the highest production, the system or systems that have been practiced in the past must be substantially changed. It is not likely that the cost of production can ever be greatly reduced, and the farmers of the state will modify their practices just as rapidly as they find it profitable to do so. Much of the thinner, rougher land now cultivated must be converted into pasture range for the cattle and sheep, or devoted to fruit production, while on the smoother and more

level lands a more intensive system of cultivation will be introduced and a much larger yield per acre secured. This does not necessarily mean cheaper production per unit, but guarantees the feeding of many more people from the same area.

As a rule, increased production requires a proportional increase in expenditure of labor and money, but as the population increases with the increased demand that must follow, the agricultural lands of the state may be made to produce several times as much as they do now. With cattle and sheep gathering the abundant forage on thousands of hills to supply meat, dairy products and clothing to our increasing population; with orchards and vineyards growing on the sunny slopes and ripening their luscious fruits in the currents of health giving mountain air; with small fruits and market garden in every valley in prodigal abundance; and with waving fields of grain on every side, the feeding of the teeming thousands who are to develop our mining and manufacturing industries need not seriously concern us for generations yet to come. Make it profitable to farm and the farmers will do the rest. When it pays better to stay on the farm than to go to town, there will be no scarcity of workers in the fields of West Virginia.

Development of Horticulture in West Virginia

By W. H. Alderman.

The horticultural history of West Virginia probably began on March 18, 1774, when George Washington leased to one William Bartlett 125 acres of land "in the barens of Bullskin" a part of the present Berkeley county. The grantee was "to have and to hold for and during the lives of the said William Bartlett, Mary his wife and Frederick their son and the life of the longest liver of them." In addition to six pounds annual rent it was agreed that Bartlett should leave a certain area of timber untouched, erect the buildings, raise 10 acres of "English Grass" and "that within seven years an orchard of one hundred winter apple trees at forty feet distance every way from each other and that one hundred peach trees shall be planted on some convenient part of the said demised land and the same to be kept always during the continuance of said term well pruned, fenced in and secured from horses, cattle and other creatures that may hurt and if any of the said trees shall die, decay or be destroyed that others of the same kind shall be planted in their place, and the entire number thereof be kept up during the said term." While without a doubt smaller home planting were made in the Eastern Panhandle previous to 1774, it is doubtful if any had been attempted as large as the one contracted for by Washington. It is interesting to note that so experienced and successful a fruit grower as Washington should have caused to be planted one of the first orchards

LABORATORY, WEST VIRGINIA AGRICULTURAL STATION.

in the state and should have selected a spot that has since developed into one of the most extensive fruit regions of the state. From his seventeenth year Washington either as surveyor or soldier had been in almost constant touch with West Virginia and was thoroughly conversant with its agricultural possibilities. That he should have foreseen the possibilities of the Eastern Panhandle is a tribute to his wisdom and sagacity as a farmer.

Shortly after Washington's venture in the east came an important development in the Northern Panhandle. In 1786 Jacob Nessly with his family moved from Lancaster county, Pa., to what is now Hancock county, W. Va. He purchased a tract of land bordering the Ohio river for four miles and about one and one-half miles wide. At that time his property consisted of unbroken forest, over-run by wild game and beset by Indians more often hostile than friendly. The intrepid pioneer, undismayed by danger or hardship went to work and cleared and planted fifty acres of apples and peaches. He grew seedling trees for the most part although it is recorded that he had also some grafted stock. As his crop was devoted to the manufacture of fruit brandies he was able to utilize the inferior seedlings to good advantage. Mr. Nessly died a wealthy man, but his success cannot be measured in dollars and cents. As the direct result of his influence upon the locality hundreds of acres of orchards have been planted and the Northern Panhandle grew famous for its production of winter apples. Long the foremost fruit region of West Virginia it has only recently been surpassed by the still greater development in the Eastern Panhandle.

Following the original planting in the Northern Panhandle the orchard industry spread down the Ohio river as far as Huntington. Many of these orchards contain large numbers of Virginia and Siberian crab trees. The fruit from these was utilized in the making of high grade cider, champagne and vinegar. Some of these old crab orchards still stand and continue to bear heavvy loads of their small, acid fruits. The character of the industry is now greatly changed and splendid orchards of Rome, Grimes and other market varieties have taken the place of the cider apples.

In Hancock and Brooke counties the growers interested themselves in the matter of storage houses and made the region famous for its late winter apples. As they grew the Willow extensively and as that variety is an exceptionally long keeper they had no difficulty in carrying their product over until April. In 1896 when the record breaking crop of America was produced fruit sold in the fall for $.75 to $1.00 a barrel. These growers stored their poduct and sold it the following spring for $2.50 and in some cases $3.00 per barrel. The example of these men could very well be followed by others since it is a comparatively easy matter to excavate excellent storage caves or cellars in our sloping hill sides.

As Jacob Nessly was the father of commercial fruit growing in the Northern Panhandle so was W. S. Miller in the Eastern Panhandle. Mr. Miller was born on a farm near Gerardstown, Berkeley county in

1819 and died upon the same farm December 31, 1901, over 82 years later. In 1851, against the advice of friends and neighbors, he planted sixteen acres of apples, peaches and plums. The beginning of the Civil War found Mr. Miller possessed of a large amount of nursery stock which he had grown himself and for which there was no market. This stock was promptly added to his already extensive orchard and the close of the War found him with 4000 bearing peach trees upon his hands. His first sales of peaches were to a Baltimore dealer and brought him six dollars a "flour barrel." They were hauled loose to Martinsburg, measured out in a flour barrel and dumped upon the floor of a box car thinly lined with straw. There were no spring packed Georgia Carriers or tissue paper wrappers in those days of primitive handling.

As time went on the plantings increased until finally the aged pioneer had planted and matured upon his own farm over 4000 apple and 25000 peach trees besides large numbers of plum, pear, quince and cherry trees. Much of this was grown in an amateur way, Mr. Miller seeming to derive more pleasure in the growing and testing of new varieties or trying new methods than he did in monetary success. He was blessed with a family of eleven children, eight boys and three girls. The same love of nature, the same desire to plant and care for and study the growing trees which characterized the father was handed down to the children and now six sons and two daughters are engaged in commercial fruit growing with a success that does credit to the early training of the father. The orchard interests of this family are probably greater than of any other family in the world. J. M. Miller located upon the famous Apple Pie Ridge holds a record of 600 barrels of apples per acre on a three acre block. These sold at an average price of $3.25 per barrel, making an income of nearly $2000 an acre.

Although the Eastern Panhandle and the Ohio Valley are the leading commercial fruit regions of the state it by no means follows that the remaining portion is not adapted to fruit culture. Throughout the great central portion of the state fruit of all kinds find congenial surroundings but here the industry is developed in the form of small home orchards rather than extensive commercial plantings. This region, extending from the crest of the Allegheny mountains westward till it mingles with the counties of the Ohio Valley, embraces a wide variety of climate and soils. These have a marked influence upon the varieties grown. In the high altitudes of Preston, Randolph and Pocahontas counties, where the climate resembles that of New York and New England, the Baldwin, Northern Spy and other hardy varieties thrive, while on the lower levels the more southern Grimes, Yark Imperial and Jonathan reach their perfection. The orchards in this region are usually small, yet they are numerous and their product in the aggregate exceeds either of the commercial areas.

Very little of this fruit reaches the general market, however, as the orchards are scattered and no one man or locality has quantity enough to attract the buyers. As a rule the quality of the fruit is inferior to that from the commercial districts, due to lack of knowledge and care in

regard to spraying and general orchard practice. When well cared for the fruit from this region can be surpassed by none.

The last census gives us some interesting figures for comparison. In point of number of bearing apple trees West Virginia stands fifteenth among the states,—the same relative position she held in 1900. When we consider the trees not yet of bearing age we find that only five states have exceeded us in recent plantings. Inasmuch as the rate of planting has increased rapidly since 1909, the year the census was taken, it is probable that the Little Mountain State is now closely pressing the leaders. With peaches our relative position is not so high yet shows a gratifying tendency to improve. In 1900 West Virginia ranked twenty-third in number of bearing trees and in 1910 twenty-first, while in numbers of non-bearing trees she ranked tenth showing that our ratio of new planting to bearing trees is much higher than in most other states.

The peach and the apple are the foremost fruits of the state, especially in commercial plantings but the ease with which plums, cherries, pears, quinces, grapes and all berries are produced leads to the belief that their rapid development will be a matter of only a few years. The advantage of unexcelled local markets and nearby general markets should act as an incentive towards greatly inceased production of these fruits.

No discussion of fruit growing in West Virginia would be complete without some mention being made of its native wild fruits. Blackberries, dewberries, strawberries and huckleberries abound in all sections of the state. In the glades of Preston, Raleigh, Nicholas, Pocahontas and other counties may be found natural cranberry bogs. A famous one in the last named county contains over three hundred acres of wild cranberries. When the commercial possibilities in these bogs have been realized and developed an industry of no mean proportion will have been added to the state. The pawpaw and persimmon are natives and present horticultural possibilities as yet untried except in a local way. The black walnut, hickory and chestnut are common in all parts of the state. In some sections chestnuts are gathered in the fall by the ton and placed upon the market. Many a boy has earned his winter spending money gathering these nuts. In the southern counties the chinquapin is found in abundance seeming to make up for its small size by its large numbers.

Vegetable gardening and trucking are closely associated with and generally are considered a part of horticulture. This branch, however, has been somewhat neglected in West Virginia. This in spite of land well adapted to the industry and local markets fairly begging for supplies. The fact that about $6,000,000 worth of vegetables are annually imported into the state is a sufficient indication of the extent of the home market that seeks a supply. The glade lands of the higher altitudes and the river bottoms present the greatest opportunity for trucking. Along the Ohio river are hundreds of acres that should be used for the production of highly remunerative crops as potatoes, cabbage, tomatoes, melons and many others. Over four million bushels of Irish potatoes were produced in 1909 at an average yield of nearly one

hundred bushels per acre and yet an importation of nearly two million bushels more was necessary to supply the non-producing towns and cities with a sufficient amount of that important vegetable.

The canning of tomatoes as an industry has recently attracted considerable attention in and about Morgan county. Over twenty-five canneries operate in that little county and have an annual production of about 200 car loads of canned tomatoes. In this case the tomatoes are frequently used as intercrops in the young orchard and as such are highly remunerative, often paying all the expenses of the orchard and yielding a profit besides.

Horticulturally West Virginia is just coming into her own. Her sunny hillsides and fertile bottoms are especially well adapted for the production of a great variety of horticultural crops. The time will come when our coal, oil, gas and timber will be exhausted, but the industrial map of America will still find room for the irregular outline of the Little Mountain State. Train loads of fruit and vegetables will replace those of coal while the dust and smoke of the coke ovens will give way to the beauty and perfume of apple blossoms.

Industrial and Commercial Progress in West Virginia 1897-1912

By I. V. Barton, Commissioner of Labor.

West Virginia has many advantages that contribute to its manufacturing and commercial interests. First among these advantages is the abundance of cheap and excellent fuel—a condition most favorable to all manufacturing in general, and especially to all such important industries as iron, steel, tin plate and glass.

Water power is very plentiful and well distributed throughout the entire state and is an excellent means of transportation. Although West Virginia is entirely inland, it has within its boundaries four navigable rivers; all these rivers traverse the fuel producing districts and finally discharge their waters into the Ohio, which for three hundred miles forms the western boundary of this state.

The railroad has penetrated every section of the state and adds greatly to the facilities for transportation.

West Virginia is a great store-house of natural wealth; is richest in fuel resources of any state in the Union; and, though they are almost intact, development is bringing them to the markets of the world. West Virginia ranks first in lumber, oil and gas, second in coal and coke. Seventeen thousand two hundred and eighty square miles of her area is rich in coal; more than eighty per cent of the bituminous area of Pennsylvania and Ohio combined; sixty per cent more than Pennsyl-

vania alone. Two thousand square miles more than Kentucky and Tennessee combined.

Capital and labor are being attracted to West Virginia. The state is being developed. Capital has discovered the wonderful fuel resources which are offered.

Intelligent and efficient labor is another inducement West Virginia has to offer, inasmuch as she has the largest percent of native born American citizens of any state in the Union.

The following tables will show the increased activity in the manufacturing and commercial interests, given by periods, name of industry, number employed, amount of wages paid monthly, capital invested, with summary, giving totals from 1897 to 1912, inclusive.

INDUSTRIES	Years	Number reporting	Number employed	Amount of wages paid monthly	Capital Invested
Amusements	1897-1899	4	47	$ 1,100	$ 14,550
"	1904-1905	3	20	1,875	28,000
Total	.....	7	67	2,975	42,550
Baking	1904-1905	2	68	$ 2,900	$ 120,000
"	1908-1909	2	26	1,400	20,000
"	1910-1911	2	11	550	13,500
Total	.....	6	105	$ 4,850	$ 153,500
Banking	1897-1899	19	35	$ 4,159	$ 544,980
"	1900-1901	7	18	1,025	485,000
"	1902-1903	52	103	7,327	2,445,150
"	1904-1905	24	52	3,146	995,500
"	1906-1907	19	41	2,716	1,012,300
"	1908-1909	15	30	2,312	697,600
"	1910-1911	17	24	2,237	745,150
Total	.....	153	303	$ 23,102	$ 6,925,680
Brewing & Distilling	1897-1899	2	23	$ 1,225	$ 50,000
" "	1900-1901	3	54	1,900	238,000
" "	1902-1903	3	8	500	400,000
" "	1904-1905	4	15	800	165,250
" "	1906-1907	3	25	1,840	162,506
Total	.....	15	125	$ 6,265	$ 1,015,756
Brick & Tile	1897-1899	8	439	$ 15,300	$ 577,000
" "	1900-1901	6	132	5,245	146,625
" "	1902-1903	9	191	6,322	227,750
" "	1904-1905	5	57	1,985	318,000
" "	1906-1907	9	279	5,358	465,500
" "	1908-1909	5	150	7,302	141,180
" "	1910-1911	5	122	4,963	182,000
Total	.....	47	1,370	$ 46,467	$ 2,058,055
Carbonated beverages	1904-1905	7	19	$ 1,115	$ 26,800
" "	1908-1909	3	7	411	27,900
" "	1910-1911	5	16	745	21,000
Total	.....	15	42	$ 2,271	$ 75,700
Carbon Black	1910-1911	2	5	$ 400	$ 80,000
Cement & Cement Blocks	1900-1901	3	16	$ 750	$ 29,000
" " "	1904-1905	3	39	2,720	14,250
" " "	1906-1907	5	61	2,450	106,800
Total	.....	11	116	$ 5,920	$ 150,050
Cigars & Tobacco	1900-1901	2	21	$ 800	$ 11,500
" "	1902-1903	2	74	2,049	22,700
" "	1904-1905	3	23	1,215	16,500
" "	1908-1909	3	68	2,540	18,700
Total	.....	10	186	$ 6,604	$ 69,400
Coal & Coke	1897-1899	32	3,397	$ 128,138	$ 4,368,000
" "	1900-1901	61	10,643	463,652	25,139,423
" "	1902-1903	144	9,486	372,736	22,522,652
" "	1904-1905	44	3,222	87,060	3,675,600
" "	1906-1907	54	4,851	185,453	8,241,950
" "	1908-1909	45	1,792	77,787	7,707,100
" "	1910-1911	67	4,447	197,869	23,087,427
Total	.....	447	37,838	$ 1,512,695	$94,740,152

INDUSTRIES	Years	Number reporting	Number employed	Amount of wages paid monthly	Capital Invested
Confectionery	1900-1901	2	12	$ 375	$ 14,500
"	1902-1903	2	33	1,386	45,000
"	1904-1905	4	81	3,991	94,200
Total	.....	8	126	$ 5,752	$ 154,700
Construction	1897-1899	5	87	$ 4,400	$ 3,065,000
"	1900-1901	2	141	6,450	60,000
"	1902-1903	14	1,810	60,565	651,124
"	1904-1905	4	95	4,900	40,500
"	1906-1907	10	468	16,807	103,520
"	1910-1911	2	.....	10,000	52,400
Total	.....	37	2,601	$ 103,122	$ 3,972,544
Contracting & Building	1910-1911	2	375	$ 13,000	$ 30,000
Creamery	1906-1907	5	6	$ 335	$ 25,090
"	1908-1909	4	17	1,460	58,950
"	1910-1911	7	28	1,681	86,000
Total	.....	16	51	$ 3,476	$ 170,040
Custom Made Clothing	1902-1903	3	154	$ 3,800	$ 28,000
" " "	1904-1905	3	51	659	21,500
" " "	1906-1907	2	63	1,350	81,000
" " "	1910-1911	4	105	3,765	22,500
Total	.....	12	373	$ 9,574	$ 153,000
Drugs	1897-1899	6	27	$ 1,315	$ 78,350
"	1900-1901	8	94	4,557	292,800
"	1902-1903	6	12	580	36,560
"	1904-1905	14	88	4,748	324,000
"	1906-1907	9	24	1,463	75,394
"	1910-1911	6	18	1,040	62,000
Total	.....	49	263	$ 13,703	$ 869,104
Electric Plants	1897-1899	6	22	$ 6,860	$ 77,000
" "	1900-1901	8	56	13,040	71,600
" "	1902-1903	15	148	7,165	2,243,300
" "	1904-1905	4	34	3,225	255,800
" "	1906-1907	8	29	1,650	112,300
" "	1908-1909	2	1	80	42,500
" "	1910-1911	5	30	1,595	285,100
Total	.....	48	320	$ 33,615	$ 3,087,600
Flour & Feed	1897-1899	5	44	$ 2,090	$ 123,000
" "	1900-1901	6	62	2,545	182,000
" "	1902-1903	7	89	4,349	290,000
" "	1904-1905	8	19	876	147,278
" "	1906-1907	4	29	1,721	122,200
" "	1908-1909	9	36	2,197	117,500
" "	1910-1911	5	27	1,752	75,500
Total	.....	44	306	$ 15,530	$ 1,057,478
Foundry & Machinery	1897-1899	6	58	$ 2,998	$ 76,600
" "	1900-1901	11	327	13,279	303,300
" "	1902-1903	7	70	3,497	100,500
" "	1904-1905	4	42	2,130	42,830
" "	1906-1907	15	283	15,021	307,200
" "	1908-1909	6	98	7,150	151,600
" "	1910-1911	8	314	10,554	672,850
Total	.....	57	1,192	$ 54,629	$ 1,654,880
Fruit Growing	1904-1905	3	67	$ 1,450	$ 69,000
" "	1906-1907	7	87	2,070	105,500
" "	1908-1909	12	100	3,188	294,101
" "	1910-1911	45	391	9,558	1,344,150
Total	.....	37	645	$ 16,226	$ 1,812,751
Furniture	1900-1901	2	65	$ 2,600	$ 26,000
"	1902-1903	4	128	5,000	265,000
"	1904-1905	3	34	1,210	55,000
"	1906-1907	5	48	2,400	105,000
"	1908-1909	3	178	7,257	285,000
Total	.....	17	453	$ 18,467	$ 736,000
Gasoline	1910-1911	6	13	$ 935	$ 68,000
Gas & Oil	1897-1899	30	232	$ 11,130	$ 1,028,250
" "	1900-1901	32	361	21,956	1,608,900
" "	1902-1903	38	144	11,618	2,498,365
" "	1904-1905	34	125	9,136	4,265,400
" "	1906-1907	31	85	6,732	888,755
" "	1908-1909	47	192	8,181	1,864,800
" "	1910-1911	104	145	7,712	2,237,495
Total	.....	316	1,284	$ 76,465	$14,391,965

INDUSTRIES	Years	Number reporting	Number employed	Amount of wages paid monthly	Capital Invested
Glass	1897-1899	6	1,030	$ 20,900	$ 307,000
"	1900-1901	12	1,103	61,000	842,000
"	1902-1903	8	322	29,400	410,800
"	1904-1905	10	980	34,520	476,000
"	1906-1907	9	773	50,088	459,934
"	1908-1909	6	631	35,279	182,000
"	1910-1911	7	617	38,780	345,500
Total	.....	58	5,456	$ 269,967	$ 3,023,224
Hotel	1902-1903	3	30	$ 950	$ 120,000
"	1904-1905	9	226	4,300	209,000
"	1906-1907	3	62	2,100	143,000
Total	.....	15	318	$ 7,350	$ 472,000
Ice	1900-1901	11	64	$ 2,715	$ 254,000
"	1902-1903	6	60	2,899	258,500
"	1908-1909	2	17	1,000	65,000
"	1910-1911	5	47	2,575	225,100
Total	.....	24	188	$ 9,189	$ 802,600
Insurance (life & fire)	1904-1905	6	31	$ 3,095	$ 280,000
" " "	1906-1907	3	4	.....	6,450
" " "	1910-1911	4	10	800	31,320
Total	.....	13	45	$ 3,895	$ 317,770
Iron & Steel	1897-1899	4	852	$ 7,296	$ 502,700
" "	1900-1901	4	516	40,700	753,300
" "	1902-1903	5	50	1,500	240,000
Total	.....	13	918	$ 49,496	$ 1,496,000
Laundry	1904-1905	4	57	$ 1,545	$ 29,500
"	1906-1907	6	103	3,178	63,000
"	1910-1911	5	105	2,950	36,000
Total	.....	15	265	$ 7,673	$ 123,500
Lumber	1897-1899	36	1,952	$ 59,682	$ 2,511,700
"	1900-1901	23	1,281	56,967	1,429,500
"	1902-1903	38	1,083	83,739	1,730,700
"	1904-1905	32	1,203	55,832	1,305,000
"	1906-1907	39	2,337	102,196	4,032,200
"	1908-1909	41	1,688	76,134	3,510,420
"	1910-1911	33	1,218	52,801	2,248,850
Total	.....	242	10,757	$ 487,351	$16,768,370
Mercantile	1897-1899	27	175	$ 9,283	$ 568,350
"	1900-1901	43	378	$ 21,734	$ 1,695,150
"	1902-1903	82	875	55,774	2,251,730
"	1904-1905	86	622	35,777	2,861,119
"	1906-1907	93	781	48,604	2,895,600
"	1908-1909	104	681	39,642	1,949,649
"	1910-1911	104	681	41,070	1,824,146
Total	.....	539	4,193	$ 251,884	$14,045,744
Plumbing	1897-1899	2	39	$ 1,800	$ 19,500
"	1900-1901	4	39	2,200	64,500
"	1902-1903	4	31	2,900	36,000
"	1908-1909	2	37	2,544	143,800
"	1910-1911	2	13	1,100	9,600
Total	.....	14	159	$ 10,544	$ 273,400
Pork & Beef Packing	1910-1911	2	48	$ 2,996	$ 157,000
Pottery	1902-1903	3	545	$ 2,500	$ 1,253,400
"	1904-1905	2	137	9,000	126,000
"	1906-1907	4	968	47,907	797,000
"	1908-1909	2	150	6,000	140,000
Total	.....	11	1,800	$ 65,407	$ 2,316,400
Publishing	1897-1899	12	197	$ 5,032	$ 150,517
"	1900-1901	8	55	2,035	28,730
"	1902-1903	16	209	18,587	208,900
"	1904-1905	20	186	7,949	183,400
"	1906-1907	23	208	8,736	291,500
"	1908-1909	17	135	6,834	131,750
"	1910-1911	14	84	5,411	103,900
Total	.....	110	1,074	$ 54,584	$ 1,098,697
Real Estate	1900-1901	5	67	$ 910	$ 385,000
" "	1902-1903	10	54	1,925	655,400
" "	1904-1905	29	22	1,130	2,706,650
" "	1906-1907	11	12	390	1,213,200
" "	1908-1909	3	4	200	24,350
" "	1910-1911	8	7	465	402,100
Total	.....	66	166	$ 5,020	$ 5,386,700

INDUSTRIES	Years	Number reporting	Number employed	Amount of wages paid monthly	Capital Invested
Sheet Metal & Tin Plate	1900-1901	2	805	$ 60,375	$ 1,800,000
" " " "	1902-1903	1	500	37,500	1,000,000
" " " "	1904-1905	3	465	50,600	295,000
" " " "	1906-1907	3	110	6,260	430,000
" " " "	1908-1909	3	1,857	90,500	1,550,000
" " " "	1910-1911	2	24	1,625	4,400
Total	.....	14	3,761	$ 246,860	$ 5,079,400
Stone, Granite & Sand	1900-1901	2	187	$ 3,300	$ 225,000
" " "	1902-1903	4	100	2,400	90,200
" " "	1904-1905	7	90	3,707	166,000
" " "	1906-1907	3	49	3,400	17,500
" " "	1908-1909	8	280	12,113	356,000
" " "	1910-1911	11	224	10,650	665,100
Total	.....	35	930	$ 35,570	$ 1,519,800
Telephone	1897-1899	24	247	$ 6,763	$ 200,190
"	1900-1901	19	100	3,149	164,450
"	1902-1903	13	80	2,557	318,500
"	1904-1905	18	235	7,345	485,720
"	1906-1907	17	23	708	39,935
"	1908-1909	11	32	940	22,405
"	1910-1911	15	49	915	59,849
Total	.....	117	766	$ 22,377	$ 1,291,049
Textiles	1897-1899	5	331	$ 8,550	$ 140,000
"	1906-1907	3	74	2,300	85,500
Total	.....	8	405	$ 10,850	$ 225,500
Transportation	1897-1899	14	419	$ 15,190	$ 4,375,900
"	1900-1901	17	891	34,645	4,456,750
"	1902-1903	9	217	10,560	785,500
"	1904-1905	16	290	12,772	679,400
"	1906-1907	2	27	1,232	189,000
"	1908-1909	5	76	2,855	46,400
"	1910-1911	15	760	19,890	3,158,750
Total	.....	78	2,680	$ 97,144	$13,691,700
Water Works	1897-1899	2	4	$ 200	$ 90,000
" "	1900-1901	2	.....	.....	13,000
" "	1904-1905	2	1	.....	55,000
" "	1906-1907	2	1	40	14,000
Total	.....	8	6	$ 240	$ 172,000
Miscellaneous	1897-1899	45	1,058	$ 34,195	$ 3,993,460
"	1900-1901	21	273	13,228	964,200
"	1902-1903	57	975	36,483	2,556,398
"	1904-1905	55	1,324	59,359	2,204,101
"	1906-1907	66	1,372	51,507	1,536,966
"	1908-1909	66	1,718	59,612	3,908,225
"	1910-1911	32	489	31,320	1,317,500
Total	.....	343	7,209	$ 285,704	$16,480,850

INDUSTRY	Number reporting	Number employed	Monthly pay roll	Capital Invested
Amusements	7	67	$ 2,975	$ 42,550
Baking	6	105	4,850	153,500
Banking	153	303	23,102	6,925,680
Brewing & Distilling	15	125	6,265	1,015,756
Brick & Tile	47	1,370	46,467	2,058,055
Carbonated Beverages	15	42	2,271	75,700
Carbon Black	2	5	400	80,000
Cement & Cement Blocks	11	116	5,920	150,050
Cigars & Tobacco	10	186	6,604	69,400
Coal & Coke	447	37,838	1,512,692	94,740,152
Confectionery	8	126	5,752	154,700
Construction	37	2,601	103,122	3,972,544
Contracting & Building	2	375	13,000	30,000
Creamery	16	51	3,476	170,040
Custom Made Clothing	12	373	9,574	153,000
Drugs	49	263	13,703	869,104
Electric Plants	48	320	33,615	3,087,600
Flour & Feed	44	306	15,530	1,057,478
Foundry & Machinery	57	1,192	54,629	1,654,880
Fruit Growing	67	645	16,266	1,812,751
Furniture	17	453	18,467	736,000
Gasoline	6	13	935	68,000
Gas & Oil	316	1,284	76,465	14,391,965
Glass	58	5,456	269,967	3,023,224
Hotel	15	318	7,350	472,000
Ice	24	188	9,189	802,600
Insurance (life & fire)	13	45	3,895	317,770
Iron & Steel	13	918	49,496	1,496,000
Laundry	15	265	7,673	128,500
Lumber	242	10,757	487,351	16,768,370
Mercantile	539	4,193	251,884	14,045,744
Plumbing	14	159	10,544	273,400
Pork & Beef Packing	2	48	2,996	157,000
Pottery	11	1,800	65,407	2,316,400
Publishing	110	1,074	54,584	1,098,697
Real Estate	66	166	5,020	5,386,700
Sheet Metal & Tin Plate	14	3,761	246,860	5,079,400
Stone, Granite & Sand	35	930	35,570	1,519,800
Telephone	117	766	22,377	1,291,049
Textiles	8	405	10,850	225,500
Transportation	78	2,680	97,144	13,691,700
Water Works	8	6	240	172,000
Miscellaneous	343	7,209	285,704	16,480,850
Total	3,117	89,303	$3,900,184	$218,215,609

Notes on Coal, Oil and Gas Development

By the Editor.

Beginnings of Coal Development.

The coal mining industry in West Virginia is still in its infancy. Many pioneer miners, who have watched it grow and expand from very small beginnings, are still living. There was no mining on an extensive scale before the civil war.

Long years of exploration and experimental development were required to prepare the way for the recent period of active remarkable development. At the beginning of the nineteenth century, West Virginia coal was used only by the cross-roads blacksmiths or by the settler whose cabin stood near an outcrop. In 1810, the people of Wheeling began in their dwellings the use of coal which was obtained from the first mine discovered near the city. In 1811, the New Orleans, the first steamboat on the Ohio burned coal which her captain Nicholas Roosevelt, had found "on the banks of the Ohio" two years before. In 1817, coal was first discovered in the Kanawha valley; and began to take the place of wood for use in the production of salt near Malden above Charleston at the Kanawha Salines, one of the most productive salt regions in America at that time. A small mine was opened near Mason City in 1819, another in 1832.

In 1835, Dr. S. P. Hildreth of Marietta, Ohio, published an account of the Appalachian coal field which directed attention to West Virginia. From 1836 to 1840, Professor Rogers, Virginia's most expert geologist, visited the West Virginia mines which had been opened at that time, and made analyses of the coals in Harrison, Monongalia, Taylor, Fayette, Mineral, Grant, Preston and Kanawha counties.

The total product for 1840 was nearly 300,000 tons, of which 200,000 tons were used in the Kanawha salt furnaces, and nearly all the remainder was consumed by the factories and dwelling houses of Wheeling. In 1843, the Baltimore and Ohio began to carry small quantities from Piedmont to Baltimore. In 1847, small shipments were made by river from Mason county, where new mines were opened in 1858 and 1859 and worked throughout the war. From 1854 to 1860, more than a score of corporations were created under the laws of Virginia for the purpose of enlisting foreign capital, but the realization of their plans was postponed by the war.

At the close of the war there was an awakening interest in the latent mineral resources of the new state. It was the beginning of a new era of development for West Virginia. In 1865, the Averell Coal Company began operations at the mouth of Pocatalico river in Putnam county. In 1866, the Peytona Cannel coal Company prepared to begin work on Coal river in Boone county. The Wayne County Coal Company was also organized; and, by 1869, a new company began to mine on an extensive scale in Mason county. A year later two coal banks were

opened in Monongalia county. In 1873, John Nuttall began operations in Sewall Mountain on New river. There was a steadily increasing business in many localities. By 1880 operations were extensive in Mineral, Monongalia, Marion, Fayette, Harrison, Ohio, Putnam, and Mason counties. They steadily increased thereafter—and especially after the introduction of mining machinery, beginning with 1890.

In June 1883, the first coal was shipped from the Flat Top field. During the ten years prior to 1882, H. M. and C. D. Straley, J. A. Douglas, and J. D. and D. E. Johnston, had gotten control of 20,000 acres along the north side of the Bluestone river in the Flat Top region which about 1882 they conveyed to E. W. Clark of Philadelphia for $105,000. Clark and his associates apportioned these lands to six joint stock companies. At the same time they organized the Trans-Flat-Top Land Association which acquired large tracts of land in McDowell, Wyoming, Raleigh, Boone and Logan counties. The holdings of the six joint companies, together with that of the Trans-Flat-Top Coal Land Association, aggregated 232,483 acres. The land of the Association was later sold and conveyed to the Pocahontas Coal and Coke Association.

Embryo operations in the coke industry began quite early, but larger operations began only recently. The first coke produced in West Virginia was made in 1843, on Cheat river above Ice's Ferry, at the old Green spring iron furnace. The first brick coke oven in the state was built in Monongalia county about 1853, and the first fire-stone coke oven in 1878. After 1880 there was a speedy growth in the development of the industry.

The production of coal in West Virginia expressed in short tons rose from 444,648 in 1863 to 1,000,000 in 1873, to 1,120,000 in 1878, to 2,335,833 in 1883, to 5,498,800 in 1888, to 10,708,578 in 1893, to 16,700,999 in 1898, to 29,337,241 in 1903 and to 61,671,019 in 1910.

In 1890 the importance of the industry led to the creation of the office of chief mine inspector, who now has five associates to aid him in his duties. In 1903 there were 530 mines inspected. The production for 1903 was 24,000,000 long tons of which nearly 19,500,000 tons were shipped to market. The state ranked third in the production of coal. The number and extent of new developments exceeded those of any preceding year. Many recent improvements for the betterment of the condition of the mines and the miners have been made. In spite of the care taken to prevent accidents, some of the most destructive mine explosions have occurred in recent years.

In 1911 the state ranked second in coal production.

Oil was first discovered in West Virginia in connection with the boring or drilling of salt wells which began on the Great Kanawha above Charleston in 1807. Although, at first, it was regarded as a nuisance except for limited use as a "medicine," by 1826 it began to produce considerable profit by its use for lamps in workshops and manufacturies. Ten years later, above the mouth of Hughes river, upon whose waters the early settlers found oil floating, Dr. Hildreth reported that fifty or one hundred barrels were collected annually from pits dug in the sand.

Here, it was sold as "Seneca oil" to which was ascribed rare medicinal properties. George S. Lemon, who arrived from lower Virginia and reared his home at the forks of Hughes river, and who promptly engaged in the collection and sale of the oil from a well which he sank in quest of salt, secured an increased production of oil. Bushrod W. Creel, who later appeared as claimant of the oil land and supplanted Lemon in the sale of oil, found his principal market at Marietta with Bosworth, Wells & Company who sold it to drug and chemical companies in Pittsburg, Baltimore, Cincinnati, New York and St. Louis. His sales to this company increased from $283.95 in 1848 to $4,400.76 in 1851, then declined to $239 in 1855 and amounted to $1000 in 1860. The price per gallon rose from 33 cents in 1855 to 40 cents in 1857.

Up the Little Kanawha, and not far distant from Hughes river was a small stream which the early settlers called Burning Spring run, because near its mouth there were two springs from which natural gas escaped. The land on which these springs were located was purchased by two Rathbone brothers, who came from New York to Parkersburg in 1842. To make a test for salt brine below the mouth of the small stream, in 1859 they bored a well in which they struck petroleum at a depth of 200 feet. Abandoning the salt project, and enlisting other Parkersburg men in the enterprise, they bored a deeper well which produced 200 barrels of oil daily. They then organized the Rathbone Oil company which sunk another, yielding 1200 barrels daily and producing an excitement which rapidly spread and increased in intensity and dramatic interest. Here was the Eldorado of 1860! The history associated with it reads like a romance.

In a wild thicket of 1860 there suddenly arose, by April 1861 a town with a hotel brilliantly lighted from mains of natural gas, and with a population of several thousand inhabitants*—a swarming mass of humanity, capitalists, adventurers and public men. It marked the beginning of the later era of gas development in West Virginia in which so many fortunes have been made and lost.

Hundreds of thousands of barrels of oil were shipped—floated—in flat-boats, on rafts, or adrift, to Parkersburg, there to be sent to market by rail or river. At last, the production exceeded the cooperage, and the oil was pumped in bulk into barges lashed to the river shore at the mouth of Burning Springs run. About 300,000 barrels thus stored were destroyed on May 9, 1863 by General Jones of the Confederate army, with 1500 troops, who visited the town, destroyed the machinery and kindled the largest fire ever started in West Virginia. The oil was simultaneously ignited, and the boats set adrift to float down stream. The light was clearly seen at Parkersburg forty miles away.

For a while the whole enterprise perished. "The derrick stood in the field with the half-bored well, the oil gushed up and overspread the ground, the houses were torn down for camp fires * * * . The few brave men who remained—the Rathbones, Camdens and McFarlands—made

*On a dark and stormy night in the winter of 1867, every light and fire in the town was suddenly extinguished by the exhaustion of the supply of gas, causing much suffering before a supply of fuel could be obtained from another source.

their money by buying these lands at low prices, sinking good wells, and disposing of their purchases to companies formed in New York and Philadelphia."

In 1864, with the approaching close of the war, oil hunters began to arrive at Parkersburg, impelled by the thirst for riches which might be obtained along the Little Kanawha above the oil metropolis. "All the world was pushing to Burning Springs along the Elizabeth pike." In 1865, there was a revival of the development and consequent excitement of five years before. Operations extended along a northwest line from Burning Springs through Wirt, Wood and Pleasants counties to the Ohio river at the anticlinal called the "Oil Break." The chief points of development were Burning Springs, Oil Rock, the California House, on Hughes' river two miles below the forks, Volcano, Sand Hill, and White Oak. Light oil was found at all these places except at Volcano and Sand Hill where the "heavy oil," used for lubricators, was obtained.

Wells multiplied in number, with a corresponding increase in production. In April 1876, ex-Governor William E. Stevenson, of Parkersburg, who collected the statistics of petroleum for the Centennial commissioners, stated that there were then 292 wells in the state averaging about 3 barrels each, or a total production of about 900 barrels daily. Parkersburg, then the chief oil market, had a rectifying capacity of 2000 barrels per day.

A second period of development extended from 1876 to 1889, in which there was but little extension of the productive area. Capitalists expended much money in drilling in new territory but without success. The new wells were not deep enough to reach the lower sands. There was almost a steady decline in the production, especially between 1879 and 1885 as shown by the following statement of the number of barrels of each year:

1876	120,000	1883	126,000
1877	172,000	1884	90,000
1878	180,000	1885	91,000
1879	180,000	1886	102,000
1880	179,000	1887	145,000
1881	151,000	1888	119,448
1882	128,000		

As well boring became a business, the invention of improved appliances resulted from necessity. Although borings along the Little Kanawha had been made with ease, operators as they advanced to new attempts in other regions of softer rock encountered difficulties which were not overcome for a quarter of a century—resulting in a check upon oil development. Finally, to prevent the choking of their uncased opening by crumbling walls, they used large iron pipes which enabled them to bore to far greater depths. By this discovery the oil development was revived in 1889. At the same time the earlier chance methods of searching for petroleum were supplanted by methods based on scientific

knowledge of its relation to certain rock formation and rock foldings. In 1874, W. C. Stiles of Wood county discovered a method to reduce the expense of pumping by connecting a series of wells, so that the entire series of wells could be pumped with one engine and one man.

A third period in the development of the oil industry began in 1889 with a sudden increase in production caused by the discovery of deeper sands by the drillers. The Doll's run, Eureka, Mannington and Sistersville fields were found and developed; and, from that time to the present, the growth of West Virginia's oil production increased rapidly.

The Fairview oil fields were first opened by the penetration of the Big Injun sand by the Fleming oil well drilled by E. M. Hukill, of Mt. Morris, Pennsylvania, and later (in 1890) by the Hamilton well near Mannington, which was a producer at first but was later plugged. The first well in Mannington, drilled by the Burt Oil company, was begun in October, 1889 and completed in April, 1890, immediately attracting the attention of the Standard Oil Company to West Virginia fields. Its completion was delayed by the distance of the nearest oil well supply companies at Clarksburg, and by the inconvenience of carrying damaged tools to that point for repair. It was a big "gusher" and was named the 'Daisy." After it was placed under control, it produced 240 barrels per day. It continued to produce for sixteen years (until 1906.)*

Development increased after 1901, and the Mannington field became one of the largest in the state. The number of fortunes made continued to increase for several years.

In 1893 oil was also discovered in the Gordon sand on Whetstone run three miles southwest of Mannington.

The productive fields of Doddridge and Wetzel counties were opened in the spring of 1892 by the completion of a well of small production on the Sullivan farm in Doddridge county.

After this date, the development over the entire western part of the state made rapid progress. The Whiskey run field in Ritchie county was developed in 1893 and 1894. The Cairo field was developed within the next year or two, and the Hendershot immediately followed. These fields have been extended until they join each other and make a practically solid producing territory, with the exception of dry streaks and spots that always appear in oil regions.

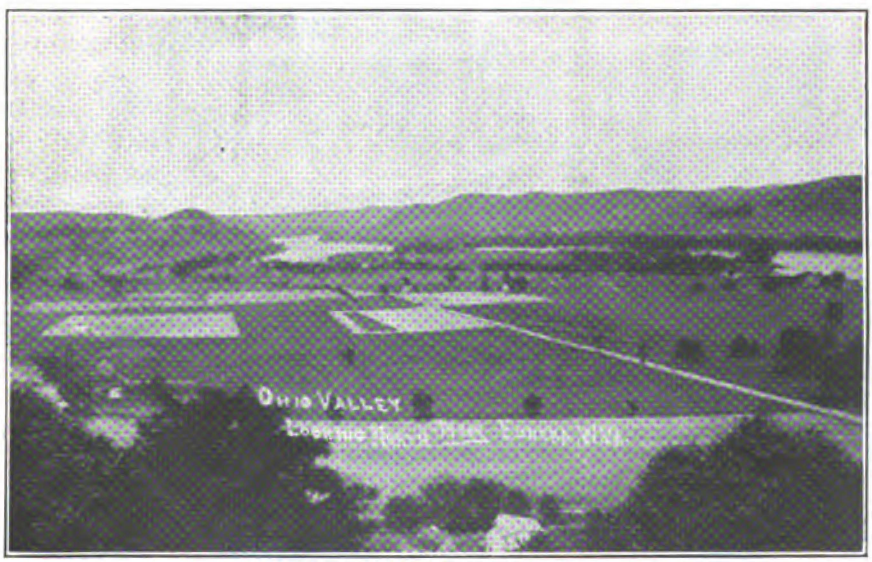
Another early development, begun at Ninevah, Pennsylvania, in 1888, was extended into West Virginia. This long and narrow field, which might be called a "shoestring" belt, extends through the western part of Greene county, Pennsylvania, into Wetzel county, West Virginia. It is a Gordon field, and produces both oil and gas. Its most prolific spots were in the vicinity of Higbee, Greene county, Pennsylvania, and at Littleton, Wetzel county, West Virginia.

The Sistersville field was opened in the winter of 1891-1892. The

*After the drilling of the first well in the Mannington field in 1888, wells were put down rapidly. The "boom" probably reached its heighth in 1893. The largest well ever drilled in the Mannington field was the Robert P. Floyd well which produced about 1600 barrels a day. During the oil "boom," the population of Mannington increased from about 400 to 5000.

Courtesy of W. Va. Geological Survey.

View of St. Marys on the Ohio.



Courtesy of W. Va. Geological Survey.

Ohio River Valley near Eureka.

OIL WELLS ON COON'S RUN, NEAR ADAMSVILLE (Harrison County).

Eureka or Belmont pool on the Ohio river thirty miles below Sistersville, was opened in the winter of 1890-1891. The Wolf Summit field was opened in the fifth sand in the early part of 1889-90.

The regions about Mannington have furnished oil from four different strata or paying sands. The Wetzel county territory has been prolific from two different strata. The Ritchie county and Wood county fields have produced oil from three or four different sands.

In the summer of 1890 the famous "Copeley" well, drilled in Lewis county, West Virginia, opened what was then entirely new territory in Gordon sand.* Immediately eastward, in its development, oil was discovered in the fifth sand which furnishes most of the present production of oil. Territory included in Lewis county and adjoining counties is one of the most prolific gas fields in the entire state.

In addition to the principal oil fields, there are several smaller pools such as the Cow run pool near Moundsville, West Virginia; the Injun field near Middlebourne, Tyler county; the Cameron, or Adeline, pool which is also of some extent; and the Jug Handle pool, in Tyler county, which is really a part of the Middlebourne development. These various pools have produced oils of many different grades and characteristics. In the department of History and Archives at Charleston, there are more than one hundred samples of oil taken from wells of various fields of the state. No two samples are alike. They vary from colorless to jet black. They also show a specific gravity varying from 65 or 70 down to 30.

The growth of oil production in barrels since 1889 is indicated by the following figures:

1889	544,113	1898	13,603,135
1890	492,578	1899	13,910,630
1891	2,406,318	1900	16,195,675
1892	3,810,086	1901	14,177,126
1893	8,445,412	1902	13,513,345
1894	8,577,624	1903	12,903,706
1895	8,120,125	1907	9,095,296
1896	10,019,770	1910	11,753,071
1897	13,090,045	1910	11,753,071

*In Lewis county in the Sand Fork fields on the Camden-Bailey-Camden lands, the first "gusher," which began to flow on the Copley farm, in September 1999, produced a sudden tide of prosperity which disturbed the social equilibrium for miles around. The increasing flow from 200 barrels per hour to 7000 barrels per day, rapidly filling ten large, hastily improvised 250-barrel tanks, and rising rapidly in the bed of the stream which was dammed to save it, and flowing down the stream eight miles beyond the first dams, soon raised the four maiden sisters of a pioneer Irish family from poverty to wealth and created a rapid demand for immediate development on adjacent lands which in the main had been leased by the South Fenn Oil company. The signs of new life were seen in the faces of the crowds of curious visitors, and the active industry of many new operators and speculators.

In the county there are now about 200 wells producing oil and 5000 producing gas. The oil and gas industry is principally in the Freeman's creek, Court house, and Hacker's creek districts. The product from the few wells drilled in Collins settlement and Skin crdeek districts has been very light. In Hacker's creek district, the gas wells have a light volume (one million to ten million feet), but have a heavy rock pressure. In both Freeman's creek and Court house districts, both the volume and pressure are heavy. In these districts have been found all the paying oil wells.

In 1898, the production in West Virginia surpassed that of Pennsylvania for the first time, and has since been greater than the production of that state and New York combined.

In the meantime a cheaper method of transportation was secured by lines of iron pipes connecting numerous wells and large tanks and larger trunk lines through which a series of powerful engines and pumps forces the oil over the mountains, and from station to station for hundreds of miles to market on the seaboard and elsewhere. The Eureka pipe line, connecting series of large tanks, was begun in 1890 to meet the needs of increasing oil production in the vicinity of Eureka, Jakes Run, Dolls Run, Mount Morris and Mannington. The first main line was laid from Eureka via Morgantown (77 miles) eastward towards Philadelphia. After the opening of the Sistersville field in 1892, another line was laid from Sistersville to Morgantown (70 miles). At the same time two other lines were laid—one from the Pennsylvania state line at Mount Morris to Morgantown (3 miles), and another to Downs (15 miles). In 1897 a main line was laid from Elm Run in Ritchie County to Morgantown. Later main lines were laid as follows: in 1900, from Downs to Sand Fork (50 miles), from Downs to Ten Mile (18 miles) and from Downs to Dolls Run (16 miles); in 1902, from Elm Run to the Kentucky state line (116 miles) to connect with the Cumberland Pipe Line Company at that point,and from Elm Run to Parkersburg (22 miles); in 1909, from Elm Run to Hamlin (83 miles); in 1912, from the Blue Creek field to Downs (110 miles). In addition to the main lines, small lines were laid from the different pools as they were opened.

Gas Development.

Although bubbles of natural gas had been obtained long before, the first gas was struck in a well which was drilled for salt at Charleston in 1815. It was first used as a fuel for manufacturing purposes on the Great Kanawha in 1843. A gas reservoir, tapped by accident, furnished force to lift the salt brine to the salt furnace where it also furnished the heat to boil it—thereby reducing the price of salt. Although it became the principal fuel at the Kanawha salt works, vast quantities were wasted before its great value as a fuel became generally recognized. With the development of the Burning Springs oil region, vast quantities of gas were accidently found, in boring for oil, and allowed to escape with no effort to control it for use.

Before the year 1882 no systematic search was made for it, but since that date the opening of new wells and the discovery of new gas fields has been a large factor in the industrial and social development of West Virginia, furnishing the inducement for the location of many manufacturing establishments seeking cheap fuel, and attracting immigrants who desire a clean and convenient fuel for their homes.

By 1904 nearly all the principal towns west of the Alleghenies were supplied, or about to be supplied, with this fuel; and the Pittsburg region received many million feet daily, through a great sixteen inch pipe line of the Philadelphia company, which, crossing through the immense field of Wetzel county, extends down into the central portion

Courtesy of W. Va. Geological Survey.

PIPE STACKED AT TOLLGATE FOR LARGE NATURAL GAS LINE.

Courtesy of W. Va. Geological Survey.

LARGEST GAS PUMPING STATION IN THE WORLD (Hastings, Wetzel County).

of Tyler county. The Tri-State Gas company supplied Steubenville and many other Ohio towns from West Virginia. The Wheeling Natural Gas company, the Mountain State Gas company, and others had extensive plants; and the Carnegie company, which consumed in its various iron and steel works at Bessemer, Duquesne, Homestead, and Pittsburg, thirty to fifty million feet daily, let the contracts for an extension of its lines into West Virginia territory.

In June, 1913, tentative investigations indicated that plans to supply Baltimore with natural gas are under consideration.

The Mineral Resources of West Virginia

By I. C. White, State Geologist.

Those who seek gold, silver, copper, tin, lead or any other precious metals, should waste no time in West Virginia. Traces she may have of all, but none in commercial quantity. Volcanic disturbances, great faults, quartz veins and extensive metamorphism of sedimentary rocks which always accompany the rare metals are comparatively unknown within her borders. Precious stones, gems, and metals have been denied the Little Mountain State, yet generous nature has so richly dowered her with common minerals and with other common things that her nat· wealth is unsurpassed by any equal area on the earth. Situated in the very heart of the great Appalachian mineral zone, the richest one of the world, all that bountiful nature could bestow, outside of the precious metals, has been showered upon her in almost limitless abundance. We are all accustomed to regard the states of Ohio and Pennsylvania as very rich in bituminous coal, and yet West Virginia contains more than both of them, with that of Virginia and Maryland thrown in for good measure. Although not known as an iron ore producing state, she nevertheless has over 300 million tons of excellent iron ores which the great iron manufacturers will be only too anxious to obtain within the near future. Her limestones are boundless in extent and unexcelled for purity, being adapted to every purpose for which lime can be utilized from the snowy whiteness of plaster to that of ordinary lime for agricultural purposes. In glass sands there would appear to be no limit in quantity, and nothing superior in quality. In petroleum she stands just ahead of Pennsylvania in quantity, being 5th in order of production, but first in quality, while in natural gas, after having wasted a quantity amounting to many scores of millions of dollars in value, she still produces for the market two-fifths as much as all the other states of the Nation. In clays and shales for fire, pressed, or common brick, tile, etc., the quantity is beyond computation, and the quality unsurpassed, while her building stones are greater in quantity and variety than those of any other state in the Union. Stone from the county of Preston is now being used in the city of New

York for one of its greatest cathedrals and some of its finest residences.

The number of millions of feet of timber which formerly covered the hills and mountains of West Virginia has never been computed, but in spite of unchecked fires and the woodman's ruthless axe up to the year 1910 she still had over one million and a half acres of virgin forests containing many billion feet of spruce, hemlock, and hardwoods remaining from her 15¾ million acres originally covered with one of the greatest forests of the world. Her great rivers, like the New, the Kanawhas, Gauley, Elk, Monongahela, Cheat, Greenbrier, and Potomac, tumble down with rapid descent from altitudes of 3000 to 4000 feet above the sea, affording splendid opportunities for the production of electric energy by that cheapest of all forces, the power of falling water, the only kind of perpetual motion which man has yet been able to harness to productive work, and which will continue, so long as the sun shines with its present vigor and the clouds and rains endure.

But rich as is West Virginia in all natural resources, she is even richer in all those gifts of climate, soil, and landscape, which lend themselves to culture and so greatly promote modern civilization.

Happily situated along the Appalachian plateau, with pure air and water, and abundant rainfall (45 inches) well distributed throughout the year; a genial climate devoid of extremes, and fertile soils highly responsive to agriculture, horticulture, grazing, dairying, and unequaled for apples, peaches, pears, and all the smaller fruits of the temperate zone; with entrancing scenery of hill and mountain and dale affording landscapes rivaling in beauty and grandeur the famous regions of Switzerland, West Virginia should prove a most inviting field for every line of human endeavor.

It is the purpose of this paper to set forth a brief account of West Virginia's mineral wealth, giving special prominence to her fuels, solid, liquid and gaseous, as embodied in coal, petroleum and natural gas, in all of which the state is particularly rich.

THE GENERAL CHARACTER OF WEST VIRGINIA'S ROCKY STRATA.

Absence of Gold, Silver, Etc.

Many citizens of this commonwealth have spent much time and labor in a fruitless search for gold, silver, copper, lead, and other rare metals, and do not seem to understand why commercial deposits of these substances cannot exist in West Virginia as well as in any other region of the country. The reason for their absence in paying quantity is that the sedimentary beds which make up the surface rocks of the state are comparatively unchanged; no extensive faults or displacements of the strata occur; no great igneous, or volcanic intrusions have disrupted the orderly succession of the rocky beds; and no intense heat has

baked them to the condition of the old crystalline envelope from which so many of the rarer metals have been derived.

The column of rocks exposed within the state consists mostly of sandstones, limestones, and shales, instead of granites, marbles, roofing slates, quartzites, quartz veins, etc., in connection with which the precious metals are always found, either directly or derivatively. The very oldest rocks of the globe which are nearly always much baked and changed as though by intense heat so as to be converted into a semi-vitreous or crystalline condition, and in which the precious metals so frequently occur, either do not exist in West Virginia, or they are covered so deeply by the later formations that only along the extreme southeastern border of the state, in Jefferson county, do they get near the surface along the great folds or arches of the Blue Ridge mountains.

It is the absence of these hard and almost insoluble crystalline rocks from the surface of West Virginia, and the presence of the softer sandstones, shales, and soluble limestones, all of which readily break down into a thick, porous covering under the disintegrating effects of sunshine and frost, wind and rain, that constitute the great difference between our soils and those of the New England states where only the crystalline rocks occur, and where the valuable soils are confined almost entirely to the alluvial or transported deposits of the river valleys and their tributaries.

Limestones.

One of the rich mineral resources of West Virginia which is often overlooked, or not considered even as such, is to be found in her vast deposits of limestone which cover large areas of the state, making the rich wheat lands of the Shenandoah Valley in Berkeley and Jefferson, as well as the fine agriculture and horticulture lands of Morgan, Hampshire, Hardy, Pendleton, Mineral, and Grant counties east of the Allegheny mountains and a broad belt along the western slopes of the same through Pocahontas, Greenbrier, Monroe, Mercer, Preston, Tucker, Randolph and Webster, where the richest of blue grass pastures spring up spontaneously. These are the regions where belts of almost solid limestone practically unmixed with shales stretch for many miles in length and often several miles in breadth entirely through some of the counties named as shown on the accompanying geologic map. In other regions of the state like Ohio, Brooke, Marshall, Marion, Monongalia, Harrison, Lewis, and portions of Barbour, Upshur, Gilmer, Doddridge, Wetzel, Tyler, Pleasants, Ritchie, Wood, Roane Jackson and other counties the limestones are interstratified with thick beds of shale whose decomposition along with the limestone layers yields very fertile soils well adapted to nearly every form of agriculture, horticulture, and animal industry, much of these areas being specially valuable for the growth of the finest grades of merino wool, so that the limestones of the state have an immense value in the making of soils aside from their direct values as minerals in the manufacture of lime for every purpose, their use

as fluxes for glass sands, iron and other ores, as well as ballast for railways, macadam for highways, etc., etc.

The great limestone quarries in the vicinity of Martinsburg, Berkeley county, Engles, Bakerton, and other points in Jefferson county, supply an enormous amount of lime and limestone of the highest grade, and give employment to a large number of people. These quarries are all in one of our oldest limestone formations known as the Shenandoah Limestone of the Cambrian and Ordovician systems down near the lowest portion of the geological column exposed anywhere in the state. This Shenandoah limestone zone is brought to the surface only in Berkeley and Jefferson, and in a small portion of Hardy and Pendleton counties, since everywhere west of the Alleghenies these limestones would underlie the surface at a depth of one and a half to three miles, depending upon the distance from the western line of the state along which this interval would be least.

These quarries in the pure limestone at Martinsburg, Bakerton and elsewhere in Berkeley and Jefferson, appear to come at about the same horizons in the Shenandoah limestone deposits as the extensive quarries in Center county, Pennsylvania, near Tyrone. The quality of much of this high grade limestone is shown by the following analysis:

	Per cent.
Lime Carbonate	98.98
Magnesium Carbonate	0.43
Silica	0.58
Alumina	0.13
Iron Oxide	0.75

Silurian and Devonian.

The limestone deposits which lie west from the Shenandoah Valley belong several thousand feet higher in the geologic series, except a patch several miles long and a mile or two wide in Hardy and Pendleton counties where the Shenandoah beds reach the surface along the crest of a great arch. These later limestones and limy flints which make the fertile soils and splendid peach and apple lands of Morgan, Hampshire, Hardy Mineral, Grant, and Pocahontas, belong in the upper half of the Silurian and the basal portion of the Devonian measures. These limestones are not quite so pure as some portions of those in Berkeley and Jefferson, but they contain vast quantities of rock, most excellent for burning into lime for fertilizing, building and other ordinary purposes, as well as some strata that are fairly pure, as witness the following analysis from a quarry near Keyser:

	Per cent.
Lime Carbonate	98.94
Magnesium Carbonate	0.68
Silica	0.49
Iron and Alumina	0.40

The Greenbrier Limestone.

On top of the Allegheny mountain plateau and just west from the main range of that great uplift across Preston, Tucker, Randolph, Poca-

hontas, Greenbrier, Monroe, and Mercer counties, getting thicker as we go southwestward, we find another great limestone deposit lying far above the Silurian and Devonian limestones of Mineral and Hardy counties. This limestone deposit which is known as the "Big Lime" of the oil and gas wells dirllers, the Mountain or Greenbrier limestone of geologists, is the same one which is manufactured into cement at Manheim in Preston county, and quarried for ballast at Sturgisson on Deckers creek, Monongalia county, at both of which localities it is only 100 to 150 feet thick, but which increasing greatly to the southwest attains to 1000 feet in Pocahontas, 1200 feet in Greenbrier, and to probably 2000 feet in Mercer county near the southwestern corner of the state. This great limestone deposit and the limy red shales above (Mauch Chunk) make splendid grazing and agricultural lands wherever their outcrops occur entirely across the state, and some of the limestone layers are sufficiently pure to serve as excellent fluxes for iron ores, and any other purpose for which a very white lime is not necessary. The cement made from the several layers of this formation at Manheim, Preston county, without any admixture of shale or other extraneous materials by the Alpha Cement Company is of a quality apparently quite as good as that manufactured in eastern Pennsylvania from the Shenandoah limestone by the same great corporation.

The following analysis of a sample of the Greenbrier limestone from Deckers creek, Monongalia county, will illustrate the composition of the purer layers of that formation, not only there but elsewhere in the state:

	Per cent.
Lime Carbonate	94.98
Magnesium Carbonate	1.38
Silica	3.31
Alumina	0.75
Iron Oxide	1.03
Titanium	0.04

Monongahela and Dunkard Limestones.

In addition to these thick limestone formations which crop to the surface over the southeastern half of the state, other and thinner limestones crop over the northern tier of counties, viz: Lewis, Harrison, western Marion, Monongalia, Wetzel, Doddridge, Tyler, Marshall, Ohio and Brooke, as well as in smaller areas over other counties southwestward from these, adding greatly to the fertility of the soil.

These limestones are generally in layers only 1 to 2 feet thick, and often separated by limy shales from ½ to 1 foot in thickness, and they belong in the Monongahela and overlying Dunkard series. Many of the layers are impure, containing much earthly matter as well as magnesium carbonate, but some of them like the Upper Washington limestone in Ohio county are fairly pure as illustrated by the following analysis of a sample of this formation in Ohio county:

	Per cent.
Lime Carbonate	92.42
Magnesium Carbonate	0.91
Silica	5.00
Oxides of Iron and Alumina	1.60

Glass Sands.

West Virginia has immense deposits of the finest quality of glass sand. Although this industry is yet in its infancy within her borders, she stands second in glass sand production, her output footing up 268,368 short tons, Pennsylvania being first with 478,089 tons, and Illinois third, with 251,907 tons, these three states supplying nearly two-thirds of all the glass sand produced in the United States during the year 1911.

The main quarries for glass sand are located in Morgan county in the vicinity of Berkeley Springs, where the stratum mostly operated on is the Oriskany sanrstone near the base of the Devonian system and 100 to 150 feet in thickness. The No. 1 sand produced in Morgan county from this great Oriskany deposit is used all over the east for the manufacture of the highest grade of glass ware and the following analyses made in the laboratory of the State Geological Survey and taken from its Volume IV, pages 380 to 385 inclusive, show the quality of this sand:

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Silica	99.60	99.30	98.99	98.85	99.860	98.840	99.350
Iron Oxide	0.0286	0.0314	0.0383	0.0543	0.068	0.017	0.111
Alumina	0.4214	0.5186	0.7717	1.0457	0.179	0.143	0.205

(1) Pennsylvania Glass Sand Co., No. 1 Sand, Hancock Plant.
(2) Pennsylvania Glass Sand Co., No. 1 Sand, Berkeley Plant.
(3) West Virginia & Pennsylvania Sand Co., No. 1 Sand.
(4) West Virginia & Pennsylvania Sand Co., No. 2 Sand.
(5) Speer White Sand Co., No. 1 Sand.
(6) Speer White Sand Co., No. 1 Sand, Sterling Plant.
(7) Berkeley Springs Sand Co., No. 1 Sand, Average 2 analyses.

The average of all these analyses gives the following:

	Per cent.
Silica	99.256
Iron Oxide	.0496
Alumina	.4692

These seven plants had a daily capacity of 955 tons of No. 1 sand in 1909.

This same great ledge of sandstone extends southward many miles from the vicinity of Berkeley Springs, but railway facilities for shipment have not yet been provided. Whenever these can be furnished, the output of Oriskany glass sand from West Virginia could be increased indefinitely. This geological formation also crops to the surface in Hampshire, Mineral, Hardy, Pendleton, Grant and Pocahontas in lines of cliffs hundreds of miles in linear extent, and doubtless at many localities within the counties named first-class glass sand may be obtained when exploitation and shipping facilities have been provided. It is this same geological horizon that produces such large quantities of glass sand along the Juniata river in Pennsylvania.

Another great white sand deposit belonging at the base of the Silurian system, viz: the Medina White Sandstone, has also been quarried for glass sand in Morgan county, one mile and a half west from Berkeley Springs where the Great Capacon Silica Sand Company opened a quarry in 1904 on the west slope of Capacon Mountain, and the product gave the following analysis in the Survey laboratory:

	Per cent.
Silica	99.86
Iron Oxide	0.06
Alumina	0.23

A vast area of this stone is accessible east from the Allegheny mountains through the counties of Mineral, Morgan, Berkeley, Hardy, Pendleton, Grant and Pocahontas, so that a fine quality of very pure glass sand from this formation as well as from the Oriskany beds will be one of West Virginia's mineral resources to a very remote date in the future.

Much higher in the geological column, viz; in the Pottsville beds of the Carboniferous system there also occur vast deposits of excellent glass sand. True, these are not of such high grade as the Oriskany deposit of Morgan county, since they contain more impurities, principally in the shape of alumina, but nevertheless these Pottsville sands can be used for all of the common grades of glass, like window, bottle, etc. These deposits have so far been mined principally near Corinth in Preston, Sturgisson in Monongalia, and Craddock in Upshur county, where the washed sands have the following composition as determined by the W. Va. Geological Survey and published in Volume IV, pages 386-390 inclusive:

	(1)	(2)	(3)	(4)	(5)
Silica	98.20	98.950	99.15	98.82	99.200
Iron Oxide	0.0457	0.048	0.0383	0.1183	0.0708
Alumina	1.5705	1.112	0.6517	0.8217	0.6492

(1) White Rock Sand Company's selected sand, Corinth.
(2) White Rock Sand Company's selected sand, Corinth.
(3) Deckers Creek Stone Stone & Sand Company's sand, Sturgisson.
(4) Deckers Creek Stone Stone & Sand Company's sand, Sturgisson.
(5) Silica Sand Company's washed sand, Craddock.

Building Stone.

No state in the Union contains more varieties of sandstone splendidly adapted for building purposes than West Virginia. These sandstones are especially numerous and valuable in the Carboniferous system, ranging from the Pocono or Big Injun sand at the base of the Carboniferous up to the top of the Dunkard or Permo-Carboniferous series. Their crushing strength varies from 5 to 8 thousand pounds to the square inch for those in the Dunkard series, to 24,000 as tested in the reddish brown stone of the Lower Carboniferous, of the Hinton region, Summers county. These building stones occur over a wide area entirely across the state wherever the Coal measure and other Carboniferous rocks extend. Recently large shipments of building stone from one of Preston county's sandstone quarries in the Conemaugh series, have been going into one of New York City's greatest cathedrals and other costly structures.

For a detailed description of the several strata of sandstone and building stone, see Volume IV, West Virginia Geological Survey, pages 308-595 inclusive.

Brick Clays and Shales.

The under clays that accompany the coal beds of Pennsylvania are also present at the corresponding horizons in West Virginia, and in Hancock, Marion and Taylor counties especially have given origin

to large industries in the manufacture of fire, building, and paving brick, tile, etc., and the great shale beds of the Conemaugh series are extensively operated for the manufacture of common building and paving brick at many points in the state, while at Huntington a splendid quality of red roofing tile is manufactured from these shales. There are also vast deposits of surface clays in nearly every county of the state, and these together with the ever present shales in every geological formation, should with its cheap coal and natural gas, make West Virginia's output of brick and clay products the greatest of any in the Union.

For a detailed description of the brick, clay, limestone and cement industries of the state, the reader is referred to Volume III, West Virginia Geological Survey.

Salt Brines.

No deposits of rock salt have yet been penetrated by the drill in West Virginia. It is possible that when a hole has been sunk in the earth to the horizon of the Salina geological formation which holds the great deposits of rock salt in western New York, northwestern Pennsylvania, and northern Ohio, the same deposits may be revealed, but as they would underlie the surface at nearly a mile a depth anywhere along the Ohio river at the western boundary of the state, such deposits if any exist cannot now be considered available. Where the Salina formation comes to the surface on Limestone run, near Keyser, Mineral county, springs containing some salt issue from it, and in the early history of the region furnished a small amount of salt to the primitive settlers, so that it is barely possible that a great deposit of rock salt may underlie all of West Virginia from the Allegheny mountain range westward, but as it is buried under from one to three miles of rock strata, it can only become available for use in the remote future.

The salt industry of the state is carried on at present by the concentration of brines obtained from boring into the basal beds of the Pottsville series, and also into the Big Injun or Pocono beds below, both of which horizons belong in the Carboniferous system. The manufacture of salt from these brines is confined to the Ohio river in Mason county, and to the Great Kanawha in Kanawha county, although brines of equal strength and abundant quantity may be obtained by drilling in nearly every region of the state west from the Allegheny mountain range, brines of very great salinity having recently been found in the Oriskany sandstone at a depth of about 4000 feet in a boring made at Parsons, Tucker county, by the Parsons Pulp & Paper Company, and in the Salina beds of the Silurian at a depth of more than a mile (5,850 feet) in the deep well drilled by Wm. Seymour Edwards on Slaughter creek near Coalburg, Kanawha county. Hence there are plenty of brines in the state accessible at all depths for the establishment of many more salt manufacturing and chemical industries. A full discussion of the brines of the state and the salt industry is given in Volume IV of the W. Va. Geological Survey.

Iron Ores.

West Virginia, although having probably 300 million tons of available iron ore within her borders, produces such a small amount annually that her production is connected up with that of Kentucky in the statistics published by the U. S. G. Survey. For the year 1911 the production of both states amounted to only 71,979 long tons, of which 57,770 was hematite ore produced by the Rose Run mine near Olympia, Ky., and the balance of 14,209 tons was brown ore produced at Orebank, 4 miles up the Potomac river from Harpers Ferry in Jefferson county, W. Va., where a mine on the south bank of the river has been in almost constant operation for nearly a century, and is the only operating iron ore mine in the state at the present time.

This is primarily due to two causes, the principal of which is lack of transportation facilities, the ore deposits being usually situated in wild, mountainous regions, remote from railways, and therefore inaccessible for commercial mining purposes. The other cause is that very little of West Virginia's iron ore is fitted for the manufacture of steel by the Bessemer process, and hence there has been no such demand for these ores within the last 3 decades as would lead to their exploitation, and the building of railways to carry them to market.

Aside from the small deposits of carbonate ores always occurring in connection with the Coal Measure rocks, the principal deposits of iron ore in West Virginia are found east of the Allegheny mountains in the counties of Jefferson, Berkeley, Morgan, Hampshire, Mineral, Grant, Hardy, Pendleton, Pocahontas, Greenbrier, and Monroe.

The following table of analyses of iron ores from several counties of West Virginia in which commercial deposits exist taken from Volume IV. opposite page 280, W. Va. Geol. Survey, will give a fair idea of the quality of the same, and also the general average of the 70 samples represented:

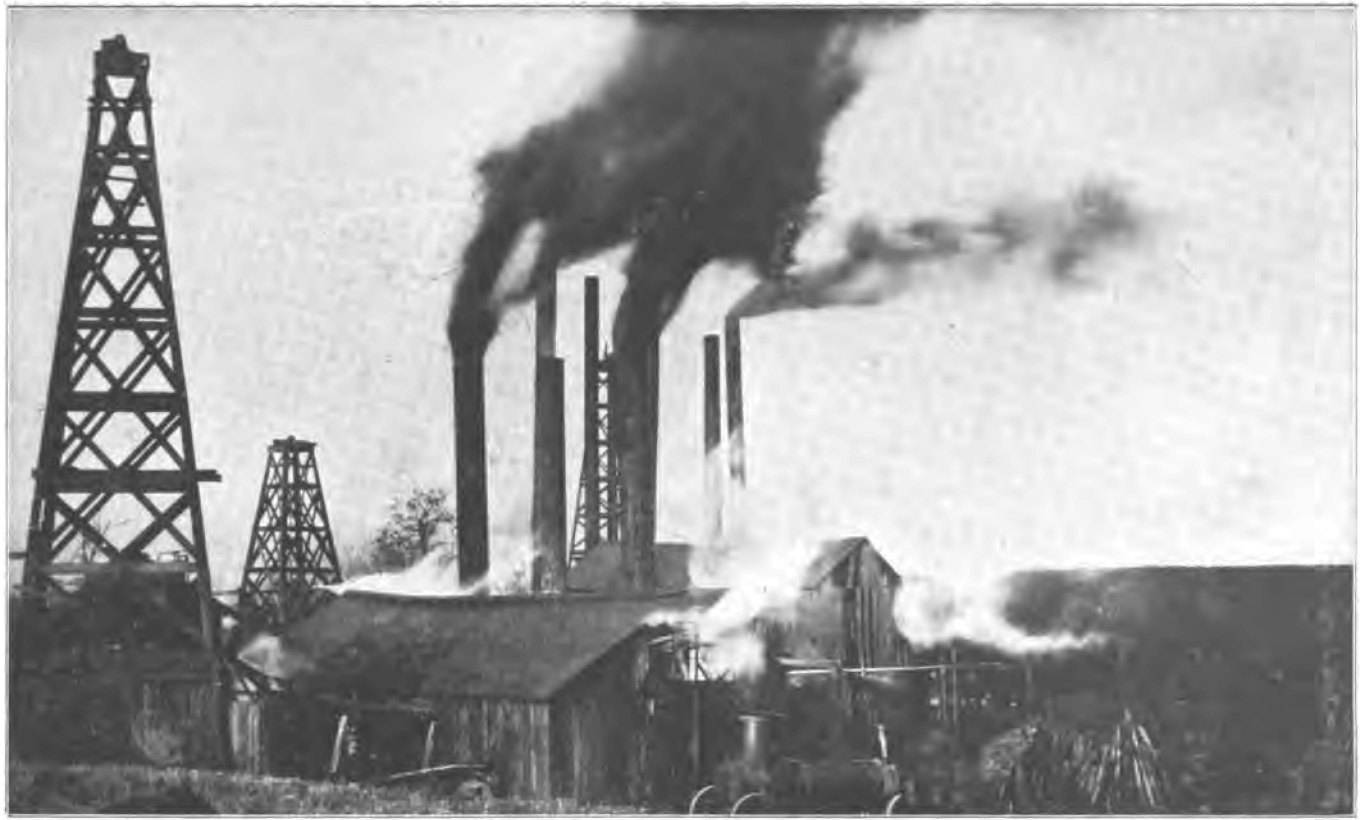
ANALYSIS OF WEST VIRGINIA IRON ORES

PENDLETON COUNTY.

Survey No.	MINE OR PROSPECT	Metallic Iron	Iron Oxide	Silica	Manganese Dioxide	Phosphorus	Sulphur	Lime Oxide	Moisture	Loss on Ignition	Titanium Oxide	Kind of Ore
47	Ami Smith	52.14	74.48	13.36	0.03	0.32	0.001	1.22	0.50	3.26	0.11	Hematite
61	A. J. Pitzenbarger	55.21	78.88	9.14	0.04	0.76	0.02	0.94	0.50	3.85	0.14	"
62	A. J. Pitzenbarger	52.03	74.35	9.64	0.02	0.74	0.06	1.76	0.35	6.36	0.18	"
51	T. F. Bowman	57.09	81.59	6.07	0.04	0.59	0.01	1.30	0.52	2.75	0.11	"
56	Bible Knob	50.07	71.36	11.74	0.04	0.67	0.03	2.46	0.90	4.39	0.07	"
53	Moatstown	41.22	58.90	26.76	0.02	0.17	0.07	0.30	0.45	3.92	0.21	Limonite
55	Dave Eye	42.44	60.65	25.40	0.02	0.33	0.11	0.34	0.53	4.28	0.29	"
52	Elkins Tract	34.42	49.19	32.30	0.065	0.32	0.05	0.36	0.60	4.93	0.40	"
57	Wash Dickerson	38.27	54.68	30.86	0.06	0.29	0.09	0.34	0.70	4.60	0.32	"
59	Wm. Boggs	37.33	53.33	29.32	0.035	0.32	0.12	0.28	0.70	5.15	0.36	"
60	Wm. Boggs	33.87	48.39	32.93	none	0.66	0.09	0.50	0.65	6.17	0.40	"
	Hematite average	53.31	.....	9.99	0.03	0.616	0.024	1.536	....	....	....	"
	Limonite average	37.925	.....	29.595	0.033	0.35	0.088	0.354	....	....	....	"
	Total Average	40.37	.....	20.68	0.033	0.47	0.059	0.89	....	....	....	

GRANT AND MINERAL COUNTIES.

49	Ketterman	56.00	80.00	6.81	0.04	0.46	0.002	1.64	0.60	3.44	0.07	Hematite
33	Feaster	41.55	59.36	5.18	0.026	0.59	0.02	1.32	1.18	5.18	0.25	"
12	Greenland Gap	42.83	61.06	13.18	0.02	0.72	0.04	4.03	0.27	9.56	0.14	"
22	Alkire at Keyser	27.24	38.88	54.30	none	0.41	0.01	0.60	0.10	1.17	0.21	"
31	County Road, Keyser	32.65	46.64	48.88	0.03	0.19	0.004	0.16	0.25	1.50	0.21	"
	Average	40.05	.....	25.67	0.023	0.474	0.015	1.55	....	....	....	"



Courtesy of W. Va. Geological Survey.

LIVERPOOL SALT WORKS (Hartford).

Courtesy of W. Va. Geological Survey.

TIPPLE AND FLEET OF PLYMOUTH MINING CO. (Plymouth, Putnam County).

HARDY COUNTY

46	Baker, Moorefield	44.46	63.52	8.30	0.035	0.48	0.019	10.35	0.50	10.75	0.07	Hematite
48	Burns Knob, Moorefield	52.70	75.28	13.81	0.04	0.26	0.007	0.22	0.14	9.71	0.01	Limonite
45	Fisher, Moorefield	53.14	75.92	10.48	0.035	0.15	0.001	0.46	0.24	10.14	0.07	"
81	Ruckman, Moorefield	31.96	45.65	34.41	....	....	....	....	....	....	....	"
34	Strausman, Lost River	39.20	56.00	35.86	0.017	0.23	0.000	0.08	0.10	11.35	0.07	"
7	Wood, Lost River	50.96	72.80	12.44	0.47	0.41	0.023	0.40	0.27	8.83	0.18	"
35	Bear Wallow, Lost River	44.69	63.84	21.63	0.04	0.39	0.02	0.16	0.29	6.66	0.21	"
	Average	45.30	.....	19.56	0.091	0.27	0.01	1.67	....	....	....	

HARDY COUNTY.

38	Pee Dee Capon	47.40	68.00	27.02	1.66	0.28	0.008	0.10	0.30	10.40	0.11	"
17	Pee Dee, lower bed	47.94	68.48	16.82	0.02	0.22	0.02	0.24	0.46	10.80	0.21	"
36	Warm Spring Mine	55.55	79.36	5.59	0.30	1.46	0.01	0.20	0.30	11.96	0.07	"
37	Warm Spring Hill	40.54	57.92	10.66	0.30	1.86	0.01	0.25	0.29	10.21	0.25	"
8	Spring Knob	42.06	60.08	22.69	0.00	0.30	0.045	0.32	0.56	7.68	0.43	"
32	Bowers shaft	30.24	43.20	32.75	0.09	0.37	0.01	0.08	0.55	8.34	0.36	"
21	Sterrett mine	38.65	55.36	21.26	2.19	0.56	0.01	0.22	0.24	10.38	0.29	"
20	Half Moon, upper level	49.17	70.24	17.70	0.03	0.20	0.02	0.12	0.04	10.11	0.29	"
2	Half Moon, lower level	42.22	60.32	22.16	0.00	0.20	0.05	0.66	0.24	9.13	0.22	"
24	Half Moon Mountain	54.58	77.97	3.03	0.017	1.10	0.01	0.25	0.90	13.09	0.07	"
28	Cold Short mine	38.08	54.40	23.84	0.06	0.71	0.12	0.44	0.54	11.67	0.36	"
27	White Metal mine	24.31	36.16	35.42	1.17	0.28	0.01	0.46	0.72	9.00	0.43	"
5	Mellon shaft	47.26	67.52	8.51	3.75	0.41	0.002	0.54	0.42	14.13	0.07	"
6	Rock Bank	58.66	83.80	3.51	trace	0.91	0.016	0.47	0.80	10.17	0.01	"
9	Flanagan road	39.20	56.00	22.39	2.53	0.49	0.023	0.25	0.30	9.65	0.29	"
39	Bear Pen	42.00	60.00	28.60	0.41	0.30	0.02	0.25	0.20	7.67	0.29	Hematite
40	Buck Thicket	24.47	35.96	39.34	0.13	0.03	0.01	0.20	0.80	5.93	0.50	"
4	Frye land	45.25	64.64	14.55	0.72	1.04	0.006	0.72	0.28	12.89	0.18	Limonite
44	Anderson Ridge	34.16	48.80	27.20	0.04	1.00	0.01	0.30	0.70	9.15	0.25	"
43	Lee tract	43.96	62.80	15.40	0.79	0.77	0.04	0.17	0.37	10.00	0.14	"
11	Bulinger Knob	42.89	61.26	21.03	0.00	0.48	0.03	0.14	0.38	10.54	0.21	"
41	Bens Hill	38.96	55.68	27.52	0.04	0.98	0.012	0.15	0.45	8.73	0.14	"
14	Bens Hill fossil	42.00	60.00	25.24	0.017	0.47	0.09	0.26	0.41	6.78	0.21	"
42	Seger, upper	41.05	58.64	15.18	2.12	1.22	0.02	0.20	0.50	11.02	0.29	"
29	Seger, lower	44.13	63.04	14.60	1.66	0.54	0.08	0.12	0.35	9.65	0.21	"
3	Five Mile mine	34.72	49.60	34.74	trace	0.14	0.01	0.58	0.22	7.73	0.21	"
19	Gochenour	40.10	57.28	20.58	0.50	0.66	0.012	0.16	0.43	10.52	0.21	"
18	Finley	49.28	70.40	15.64	0.00	0.48	0.01	0.25	0.13	10.62	0.07	"
1	Baker Mountain	40.37	57.68	22.44	0.00	0.32	0.17	0.91	0.16	10.97	0.18	"
23	Farmer land	46.85	66.93	15.13	0.28	0.61	0.25	0.26	0.50	9.95	0.21	"

ANALYSES OF WEST VIRGINIA IRON ORES—Continued

Survey No.	MINE OR PROSPTCT	Metallic Iron	Iron Oxide	Silica	Manganese Dioxide	Phosphorus	Sulphur	Lime Oxide	Moisture	Loss on Ignition	Titanium Oxide	Kind of Ore
	Average	40.22	.....	20.65	0.627	0.613	0.027	0.31	.....	.....	.....	"
	County average	42.79	.....	20.44	0.526	0.551	0.024	0.57	.....	.....	.....	"
	MONROE COUNTY.											
70	Crimson	47.44	67.82	20.02	trace	0.56	0.02	0.20	0.09	10.03	0.07	Limonite
72	Zenith	54.09	77.29	9.22	0.035	0.16	0.03	0.30	0.80	8.78	0.11	"
74	Epling	52.20	74.37	11.67	trace	0.81	0.01	0.21	0.11	9.67	0.07	Hematite
75	Peters Mountain	48.10	68.91	23.74	0.039	0.55	0.01	0.21	0.20	5.10	0.25	"
71	Mark Patton	53.20	74.02	5.84	0.49	1.01	0.02	1.20	0.08	10.52	0.14	Limonite
69	Doss	51.38	73.54	10.43	0.02	1.06	0.02	0.30	0.23	11.85	0.07	"
68	Cowder	49.56	64.40	18.52	0.065	1.26	0.02	0.26	0.17	11.47	0.18	"
73	Rocksalia Spring	54.22	77.42	3.43	0.017	1.23	0.02	0.30	0.49	12.24	0.04	"
76	Peters Mountain	41.74	59.61	11.82	0.49	1.10	0.01	0.36	0.10	9.77	0.18	Hematite
	Average	50.22	.....	12.74	0.128	0.86	0.017	0.37	.....	.....	.....	
	GREENBRIER COUNTY.											
67	Fertig	58.23	83.19	4.56	0.035	0.61	0.07	0.24	0.27	7.53	0.36	Limonite
65	Perry	59.23	84.67	7.24	0.02	0.19	0.22	0.24	0.23	5.02	0.07	"
64	Dan	58.93	84.22	2.01	0.02	0.72	0.02	0.20	0.19	11.26	0.07	"
66	Monument	36.77	52.54	37.26	0.02	0.92	0.02	0.22	0.10	5.92	0.07	"
63	Little Creek	55.59	76.57	9.40	0.02	0.61	0.02	0.22	0.30	10.50	0.07	"

Average	53.35	.....	12.094	0.023	0.61	0.07	0.224	.....	.....	.....	
JEFFERSON AND BERKELEY COUNTIES.											
78 Harpers Ferry	41.21	58.87	20.75	1.40	0.31	0.02	0.26	0.27	10.03	0.21	Limonite
79 Harpers Ferry (washed)	44.14	63.05	19.70	0.39	0.28	0.03	0.30	0.40	9.88	0.05	"
80 Martinsburg	38.63	55.17	35.98	.....	.....	.....	.....	.....	.....	.....	"
Average of State	43.86	.....	19.48	0.328	0.56	0.031	0.62	.....	.....	.....	Samples 70

The quantity of iron ores in these several counties has been estimated by Prof. G. P. Grimsley, who collected the data embodied in Volume IV, W. Va. Geol. Survey, as follows:

Pendleton county, 30,000,000 tons.
Grant and Mineral, no estimate, quantity large.
Hardy and Hampshire, 100,000,000 tons.
Greenbrier, 35,000,000 tons.
Pocahontas, no estimate, quantity large.
Monroe, no estimate, quantity large.
Jefferson, no estimate, quantity large.
Berkeley and Morgan, no estimate, quantity considerable.

This summary gives a total of 165 million tons in the 4 counties upon which Prof. Grimsley made estimates, and the other 7 counties in which no estimates were attempted are known to hold large supplies of iron ore, since they lie in the same geologic zone, and giving these 7 an estimate of only 135 million tons, would make the total commercial ore resources of West Virginia foot up not less than 300 million tons, a very respectable figure, and one that should finally result in establishing a large iron industry within the confines of the state.

Petroleum and Natural Gas.

The petroleum industry owes quite as much, or even more, to West Virginia as to Pennsylvania, since as is well known large quantities of this oil were marketed from her territory on Hughes river in Ritchie and Wirt counties, many years before Drake completed the historic well near Titusville, Pa., in 1859. Then, too, the tools with which Capt. Drake was enabled to penetrate the earth's rocky strata, had all been invented in what is now West Virginia, half a century previous, as is related in volumes I and I (A), West Virginia Geological Survey, to which the reader is referred for the details of West Virginia's petroleum history.

The state's annual output of oil up to the close of 1911, since accurate statistics have been kept, beginning with 1876, is as follows:

PRODUCTION OF PETROLEUM IN WEST VIRGINIA FROM 1876 TO 1911, INCLUSIVE.

Year	Production Barrels
1876	120,000
1877	172,000
1878	180,000
1879	180,000
1880	179,000
1881	151,000
1882	128,000
1883	126,000
1884	90,000
1885	91,000
1886	102,000
1887	145,000
1888	119,448
1889	544,113
1890	492,579
1891	2,406,218
1892	3,810,086
1893	8,445,412
1894	8,577,624
1895	8,120,125
1896	10,019,770

1897	13,090,045
1898	13,615,101
1899	13,910,630
1900	16,195,675
1901	14,177,126
1902	13,513,345
1903	12,899,395
1904	12,644,686
1905	11,578,110
1906	10,120,935
1907	9,095,296
1908	9,523,176
1909	10,745,092
1910	11,753,071
1911	9,795,464
Total	226,856,521

This total of 226,856,521 barrels should be increased by about 3,000,000 barrels as the estimated production up to 1876, and by about 12,000,000 barrels for 1912, so that by January 1st, 1913, the total production from the state would foot up about 241,000,000 barrels in round numbers, since the first well was drilled at Burning Springs, Wirt county, in 1860.

The quality of West Virginia petroleum is of the very highest grade produced anywhere in the world, and while it is very probable that most of the large oil fields of the state have already been developed, it is also certain that West Virginia will continue to produce several million barrels of petroleum annually for a long time in the future, the declining output of her 13,014 oil wells on January 1st, 1912, with an average production of 2 barrels daily being continually reinforced and supplemented by the drilling of new wells and the development of new pools and spurs, near the older developed fields.

As to the area of the state now producing oil, and in which it is possible to find commercial quantities of the same, it might be stated that all the region lying 10 to 20 miles west from the western slope of the Allegheny mountains is possible oil territory, and is comprised within the following list of the counties of the state:

Boone	Marshall
Braxton	Mason
Brooke	Mingo
Cabell	Monongalia
Calhoun	Ohio
Clay	Pleasants
Doddridge	Putnam
Gilmer	Ritchie
Hancock	Roane
Harrison	Taylor
Jackson	Tyler
Kanawha	Upshur
Lewis	Wayne
Lincoln	Wetzel
Logan	Wirt
Marion	Wood

The counties of the state east from the ones mentioned, with the possible exception of western Preston, Barbour, Webster, Nicholas, Fayette, Wyoming and McDowell, lie within the greatly disturbed region where the strata are highly crumpled, folded and broken, so that whatever oil they may once have held has escaped into the air most probably in the form of gas or vapor through the heat generated in the earth movements giving origin to the folded, fissured and broken strata. The rocks in these last mentioned 7 counties are not greatly disturbed ex-

cept along their eastern margins, and hence it is barely possible, but not probable that some small pools of commercial value may yet be discovered within their borders.

Natural Gas.

Twenty-two states of the Union produce natural gas in commercial quantity, but of the total, 508 billion cubic feet, worth in round numbers 74 million dollars, marketed in the entire United States in 1911, this state produced 207 billion, or slightly more than two-fifths, and leaving out Pennsylvania's production (104 billion), West Virginia yielded for the market more than all of the other 20 state together, both in value (28½ millions) and quantity (207 billion feet), of which 81 billion cubic feet was consumed within the state, and 126 billion was transported for consumption beyond her borders. These figures take no account of the large quantity used by the oil and gas well operators unmetered from casing heads and other sources, nor of the other very large quantity, probably amounting to ½ billion cubic feet daily, that escapes into the air from oil and gas wells unused for any purpose, so that it is practically certain that at least one billion feet of natural gas, amounting in heating value to one million bushels of coal, or 40 thousand short tons daily, or nearly 15 million tons annually, issues from the earth within the boundary of the Commonwealth. The value of the quantity marketed from the state in 1911, viz; 28½ million dollars, was more than half the value of the entire quantity of coal produced by the state during the same year viz; 52 2-3 million dollars, and if that which escaped into the air and was completely wasted could have been saved and marketed, the natural gas and gasoline produced in 1911 would have equaled or exceeded in value that of the entire coal production of the state for that year.

On January 1st, 1912, West Virginia had 4755 productive gas wells distributed over 33 of the 55 counties with rock pressure varying from 0 to 1040 pounds to the square inch, according to the U. S. G. Survey's statistics. The following is the list of counties producing natural gas in commercial quantity:

Boone	Mingo
Clay	Wayne
Brooke	Monongalia
Cabell	Nicholas
Calhoun	Ohio
Doddridge	Pleasants
Fayette	Putnam
Gilmer	Upshur
Hancock	Ritchie
Harrison	Roane
Kanawha	Taylor
Lewis	Tyler
Lincoln	Wetzel
Marion	Wirt
Marshall	Wood

In addition to these gas producing counties, it is possible that pools of gas of commercial value may hereafter be found in Preston, Barbour, Randolph, Webster, Raleigh, Wyoming and McDowell counties, especially if drilling operations should be carried to great depths. In the counties

east from the Allegheny mountains, however, the rocks are so tilted, fissured, faulted and contorted, that probably most of the gas they may once have held has long ago escaped into the air along with the petroleum.

With such a wide area of gas territory and so many (8 to 10) gas bearing sands or strata, the state is assured of a vast supply of very pure fuel for a long time in the future, and hence should remain as it is now the glass manufacturing center of the country and should also attract many other lines of manufacture in which abundance of this pure cheap fuel is essential to success. No other state or country in the world so far as is known can even approach West Virginia in the quantity and quality of its natural gas, the average heating value per cubic foot being about 1140 B. T. U.

Coal.

Last but not least of the mineral resources of West Virginia to be described in this brief review, come her coal fields. For quantity, variety and quality, her coals excel those of any other American Commonwealth, and constitute a much richer dowry for the Little Mountain State than any known gold deposits of other states. On account of her wealth of fuel in every form, solid (coal), liquid (petroleum,) and gaseous, (natural gas), it has been suggested that West Virginia should be known as the "Fuel State" in preference to any other cognomen, since including her vast stores of petroleum and natural gas, she was originally dowered with more fuel resources than any other single political district in America.

Pocono Coal Beds.

There are some coal beds in West Virginia, 2000 to 3000 feet below the Pocahontas coals, or base of the true Coal Measures. These belong, however, in the Pocono Sandstone or Big Injun Oil Sand division, the basal member of the Carboniferous system often called the "False Coal Measures" and are so impure and irregular and enclosed in strata so steeply inclined and crushed that they have been converted into a semi-anthracite. Some attempts have been made to develop these coals in the summits of the mountains of western Berkeley and eastern Morgan, as well as in Hampshire, Greenbrier, and other regions along the line between West Virginia and Virginia, but in all cases the areas holding coal have proven too small and narrow, and the coal itself too impure to warrant the expensive installations necessary for commercial development. For a fuller account of these semi-anthracite coals the reader is cited to Volume II(A), pages 1-9, West Virginia Geoolgical Survey, in which a report made by Mr. Wm. Griffith, the eminent coal expert of the Pennsylvania anthracite fields is printed in full on these Morgan and Berkeley county coals.

Classification.

The rock formations that make up the true Coal Measures in which the commercial coal beds of West Virginia occur have been subdivided by geologists as follows, beginning with the lowest or oldest:

Pottsville
Series
Pocahontas group
(Lower)
Nos. 1 and 2
No. 3
No. 4
No. 6, etc.
New River group
(Middle)
Fire Creek.
Beckley.
Sewell.
Beaver River, or
Kanawha group
(Upper)
Eagle.
No. 2 Gas.
Cedar Grove.
Winifrede.
Coalburg.
Stockton-Lewiston.
Allegheny
Series
Clarion.
Lower and Middle Kittannings.
Upper Kittanning.
Lower Freeport.
Upper Freeport.
Conemaugh
Series
Brush Creek.
Bakerstown.
Elk Lick.
Little Clarksburg.
Little Pittsburg.
Monongalia
Series
Pittsburg.
Redstone.
Sewickley.
Uniontown.
Waynesburg.
Dunkard
Series
Waynesburg A. and B.
Washington.
Jollytown, etc., etc.

The coals of these several groups will now be briefly described, beginning with the lowest and oldest, viz:

The Pocahontas Group.

The lowest group of the true Coal Measures was first exploited for commercial purposes near the town of Pocahontas, Tazewell county, Virginia, just east from the line between Virginia and West Virginia, and hence the coal beds in the first 600 to 800 feet of these basal rocks have been named in their order upward as Nos. 1, 2, 3, 4, 5, 6, etc, "Pocahontas," the thickest and most valuable bed of all being No. 3 Pocahontas, with its principal development in Mercer, McDowell and Wyoming counties. The coals of this group are practically all of the same physical aspect, having the typical coking, or columnar structure, soft, low in volatile matter, ash and sulphur, and generally known as smokeless coals, unexcelled for steam and general fuel purposes, being very highly prized for naval uses by the ships of every land owing to their high heating values and freedom from liability to spontaneous combustion on shipboard. Although excellent coking coals, the tendency in recent years is not to coke them separately in the bee-hive oven, but to mix them with higher volatile coals in by-product ovens located at the points of coke consumption so that at the present time few, if any, bee-hive ovens are building, many of those already constructed having been long idle, and it is hoped will remain so indefinitely, since the policy of transporting these splendid coals to by-product ovens, where the resulting fuel gases, coal tar, ammonia and other valuable by-products can be profitably utilized, is one that should have been followed from the very beginning of the coking industry in the Pocahontas region.

The character and quality of the No. 3 Pocahontas bed which may be

taken as typical of the other Pocohontas coals, is well illustrated by the average of 64 composite samples collected and analyzed by the U. S. G. Survey in 1909, the details of which are published in Bulletin Two, W. Va. Geological Survey in Table No. 2 as follows:

	Average 64 Air Dried Samples. Per Cent.	Average 64 Samples as Received from Mines. Per Cent.
Moisture	0.68	3.30
Volatile Matter	14.29	13.88
Fixed Carbon	80.55	78.46
Ash	4.48	4.36
Totals	100.00	100.00
Sulphur	0.62	0.59
B. T. U. Calorimeter	15008	14603

The average of 38 samples of No. 3 Pocahontas coal collected from mines in Mercer and McDowell counties by the W. Va. Geological Survey, all air dried and analyzed in the laboratory of the State Survey yielded the following results:

Average analysis of 38 samples Pocahontas No. 3:

Moisture	0.23
Volatile Matter	17.47
Fixed Carbon	77.80
Ash	4.50
Total	100.00
Sulphur	0.62
Phosphorus	0.0055
B. T. U. Calorimeter	15095

Average thickness of coal at the 38 mines sampled, 6 feet 5 inches.

The average of 13 samples of Pocahontas No. 3, and 10 samples of Pocahontas No. 4 collected and analyzed by the State Geological Survey as received from the mines, gives the following results:

	Pocahontas No. 3. Per Cent.	Pocahontas No. 4. Per Cent.
Moisture	1.83	1.79
Volatile Matter	15.51	15.54
Fixed Carbon	77.36	77.81
Ash	5.30	4.86
Totals	100.00	100.00
Sulphur	0.69	0.66
Phosphorus	0.009	0.006
B. T. U.	14869	14999

These results reveal coals of extraordinary purity and heating values, and fully account for the ever growing popularity of the Pocahontas coals in the markets of the world.

The other beds of the group while thinner and not now of much commercial importance are of practically the same chemical composition as No. 3 and No. 4, and the time is not very remote in the future when all of these pure coals, Nos. 1, 2, 5, 6, etc., of the Pocahontas group even down to 2 feet in thickness or less will become commercially valuable and be mined with much more care to save the product than the wasteful methods now in vogue for the thicker beds.

Pocahontas Coke.

When these Pocahontas coals are coked a very pure product results, its only weakness being due to its excessive purity, or low ash content

apparently, so that its burden bearing capacity in the high modern iron furnaces is not equal to that of Connellsville or other well known furnace types, although the Pocahontas coke greatly excels them in heating value and for purely metallurgical purposes where great burden bearing capacity is not required. The following analyses give the average of 32 samples of Pocahontas No. 3 coke from as many oven plants in Mercer and McDowell counties, and of 3 samples of No. 4 Pocahontas coke from McDowell county, as follows:

	No. 3 Pocahontas Coke. Average 32 Samples Per Cent.	No. 4 Pocahontas Coke. Average 3 Samples Per Cent.
Moisture	0.09	0.85
Volatile Matter	0.98	1.41
Fixed Carbon	90.99	89.08
Ash	7.94	8.68
Totals	100.00	100.00
Sulphur	0.58	0.67
Phosphorus	0.0061	0.011

The New River Group.

Higher up in the Pottsville series we come to a group of 3 coal beds which were first developed for commercial use along the canon of New River in Fayette and Summers counties, and hence the Pottsville coals of those counties and the adjoining region of Raleigh, Greenbrier, Nicholas, Webster, etc., to the northeast have always been known under the name of "New River" coals. These coals are 3 in number in the following ascending order, the lowest one coming 300 to 400 feet above Pocahontas No. 3, viz:

Fire Creek or Quinnimont coal.
Beckley coal.
Sewell coal.

These three beds are seldom all of commercial thickness in the same section or hill, and they occupy a rock interval of 300 to 350 feet, the Beckley coming about 100 feet above the Fire Creek seam, and the Sewell 200 to 250 feet above the latter. In character, quality, and general physical aspect, the New River coals very much resemble those of the Pocahontas group, except that they are slightly higher in volatile matter as well as a little lower in ash, thus outranking a very little the Pocahontas group in heat units. They also coke well, like the Pocahontas beds, and are specially popular for general steam and naval purposes.

Some of these same coals extend across southwestward into McDowell county where they overlie the Pocahontas group and are known as the "Pocahontas thin veins," one of them which appears to correlate with a portion at least of the Sewell bed being known variously as the "Davy" or "Tug River" seam and being distinguished as furnishing coal with a greater B. T. U. value than any other bed of the entire Appalachian field.

The quality of these several coals is shown by the following averages of numerous samples both in the State Geological Survey laboratory, and in that of the U. S. G. Survey:

	Mois.	V.M.	F.C.	Ash.	Sul.	Phos.	Calo. B.T.U.	Calcu. B.T.U.
	Mois.	V.M.	F.C.	Ash.	Sul.	Phos.	Calo. B.T.U.	Calcu. B.T.U.
Fire Creek Coal:								
(Average 3 analyses, W. Va. G. Survey)	1.05	18.34	77.08	3.53	0.67	.011	15211	14876
(Average 17 Analyses, W. Va. G. Survey)	0.60	19.93	75.20	4.27	0.67	.035	15208	.....
(Average 15 analyses, U. S. G. Survey	3.24	16.26	75.19	5.31	0.64	....	14391	14627
Beckley Coal:								
(Average 5 analyses, W. Va. G. Survey)	1.32	16.61	78.07	4.00	0.79	.013	15041	14803
(Average 12 analyses, U. S. G. Survey	3.32	14.43	77.23	5.02	0.72	....	14452	14610
Sewell Coal:								
(Average 25 analyses, W. Va. G. Survey)	1.10	19.72	75.67	3.51	0.88	.005	15030	14812
(Average 44 analyses U. S. G. Survey	3.42	18.70	74.46	3.42	0.80	....	14629	14726
(Average 34 analyses, W. Va. G. Survey—air dried)	0.70	23.95	75.04	3.31	0.74	.008	15223	.....
Welch Coal:								
(Average 5 analyses W. Va. G. Survey	1.53	16.51	74.45	7.51	0.83	.020	14681	14350
(Average 3 analyses, U. S. G. Survey	2.29	13.55	75.88	8.28	0.54	....	14051	14090
Dary (Sewell) Coal:								
(Average 7 analyses W. Va. G. Survey).....	1.90	18.08	77.03	2.99	0.67	.008	15345	15039
(Average 6 analyses W. Va. G. Survey—air dried)	0.21	18.16	77.50	4.13	0.87	.0041	15370	.....

The coke from the Fire Creek and Sewell seams is also of very great purity as may be observed from the following average analyses:

	Mois.	V.M.	F.C.	Ash.	Sul.	Phos.
Coke from *Fire Creek Coal:*						
(Average 6 analyses, W. Va. G. Survey)	0.13	0.98	91.71	7.18	0.64	0.0627
Coke from *Sewell Coal:*						
(Average 12 analyses, W. Va. G. Survey	0.14	1.06	91.26	7.54	0.75	0.0095

These very pure coals of the New River group extend northeastward from that stream through Greenbrier, Nicholas, Webster and Randolph, thinning below present commercial dimensions in Tucker and Preston counties, the whole Middle and Lower rock groups of the Pottsville apparently disappearing before the Maryland line is reached to the northeast.

The Rich Mountain Coal Company of which the Hart Brothers of Clarksburg are the principal owners have exploited two of these New River coals on the left fork of the Buckhannon river in Randolph county, probably the Sewell and Beckley, or Sewell and Fire Creek, where each of the beds is about 3 feet thick and separated by an interval varying from 30 feet to over 100 within a mile or less. These coals increase in volatile matter to the northeast, but they retain their very pure character in ash or sulphur contents even as far north as the Tygarts Valley river in the gorge of which below Elkins they have been explored. The Randolph county phase of these coals is illustrated by the following average analysis of 7 air dried samples, 3 from the left fork of the Buckhannon

and 4 from the region below the Beverly and Buckhannon turnpike and the end of Rich Mountain in the gorge of Tygarts river:

	Per cent.
Moisture	0.83
Volatile Matter	29.08
Ash	4.94
Total	100.00
Sulphur	0.86
Phosphorus	0.013

A specimen of coke made by the Rich Mountain Company from these coals and analyzed by the W. Va. Geol. Survey, gave the following results:

	Per cent.
Moisture	0.36
Volatile Matter	0.29
Fixed Carbon	65.15
Fixed Carbon	92.68
Ash	6.67
Total	100.00
Sulphur	0.82
Phosphorus	0.010

When proper railway facilities are at hand, a large area of this coal can be operated between the New and Tygarts river that has as yet been only slightly explored, and these coals will furnish a very large tonnage of most excellent fuels and cokes throughout the region in question, where up to the present very little attention has been given them.

The Kanawha Group.

In Western Pennsylvania a thin group of rocks only 60 to 80 feet thick and containing but 3 unimportant coals beds makes its appearance between the Homewood sandstone, the topmost member of the Pottsville series in that region, and the main mass of the Pottsville or Connoquenessing sandstones below. The coals are hard, rather impure and inclined to be of the "block" type. In passing southwestward across West Virginia, this group of coals, so thin and unimportant in western Pennsylvania, appears gradually to expand until on the Great Kanawha river the group attains a thickness of 1000 feet, and holds 6 or more valuable coal beds where the group received its name, "Kanawha." Still further to the southwest where these measures pass into Kentucky from southern Mingo, it attains a still greater development, measuring over 1800 feet, and holding 8 or more coals of commercial thickness at one point or another, but never all in the same section or mountain.

These Kanawha measures hold the principal coal beds in Webster, southeastern Braxton, Nicholas, northern Fayette, and Raleigh, Kanawha, Boone, Lincoln, Logan, Wyoming, and Mingo counties, as may be seen on the accompanying state geological map.

The coals in the Kanawha or Upper Pottsville group, subdivide naturally into two classes, very distinct in physical character. In the upper portion of this great formation as indicated by the diagram, are three beds, viz; in descending order, the Lewiston or Stockton, the Coalburg,

and the Winifrede. These are all characterized by layers of very hard, pure coal which split into oblong blocks with a physical appearance intermediate to ordinary bituminous coal and cannel. These beds vary in thickness from 3 to 12 feet, and it often happens that not more than one of them and seldom more than two are present in commercial condition on the same property. These coals, on account of their high fuel value and resistance to pulverization in transportation and handling, as well as their small loss of fuel value in storage, have long retained their hold on commercial markets under the name of "Kanawha Splint."

The quality of the three coals is very similar, as may be observed by the following averages from several analyses of each, made in the laboratory of the State Geological Survey.

	Mois.	V.M.	F.C.	Ash	Sul.	Phos.	B.T.U.
Lewiston coal (6 analyses)	2.19	33.27	60.02	4.50	1.08	.008	13480
Coalburg coal (24 analyses)	2.16	32.77	55.13	7.78	0.81	.004	13879
Winifrede coal (8 analyses)	1.84	34.44	56.92	6.79	0.66	.005	13657
General average (38 analyses)	2.06	33.49	57.36	6.36	0.85	.006	13672

The above averages give the true chemical composition of these famous "Kanawha Splints," and they also emphasize the superior quality of these justly celebrated fuels, as well as insure a continuous demand for the same in the fuel markets of the country.

Lower Kanawha Coals.

Separated from the lowest of the 3 Upper Kanawha or Splint coals just described, by an interval of 200 to 300 feet of rocky strata, there comes in another class of coals, usually 4 in number as shown in the diagram, but sometimes more. These coals are softer than the Splint coals above, and gradually approach with the lowest one (Eagle) the columnar structure of the New River coking coals, although much higher in volatile matter, and therefore known in the market as "gas" coals, two of them having received the names, "No. 1 Gas," and "No. 2 Gas," which still adhere to them from their use in the manufacture of illuminating gas. With the exception of the uppermost (Cedar Grove) which is intermediate in type to Splint and ordinary soft bituminous coal, they constitute excellent coking coals as well as general fuels for either steam or domestic purposes.

The average chemical constitution of these several beds as shown from analyses made by the State Geological Survey is as follows:

	Mois.	V.M.	F.C.	Ash	Sul.	Phos.	B.T.U.
Cedar Grove coal (12 analyses)	0.94	35.91	57.99	5.21	0.75	.0036	14418
No. 2 Gas coal (34 analyses)	1.49	33.42	59.59	5.50	1.29	.010	14233
Powellton coal (6 analyses)	1.33	32.19	60.61	5.87	0.97	.006	14309
Eagle coal (12 analyses)	1.80	29.99	64.04	4.17	0.77	.010	14661
General average (64 analyses)	1.39	32.88	60.56	5.19	0.95	.007	14405

These analyses reveal a progressive decrease in volatile matter, and a corresponding increase of fixed carbon in descending to lower and lower coal beds from the top of the Kanawha series. These analyses also disclose that the Lower Kanawha coals, as well as those of the

Upper Kanawha series are fuels of great purity and general excellence, being high in fixed carbon and heat units as well as low in the impurities of ash, sulphur, and moisture, thus insuring a constant demand for them in the commercial markets.

The general excellence of all the coals in the great Kanawha group is so well known to the coal markets of the country that it is unnecessary to describe each particular bed in detail, except to state that the No. 2 Gas coal is the most persistent and valuable bed of the entire group, and probably furnishes a greater tonnage than any other single member. It generally contains enough hard or splinty coal to make an ideal shipping fuel while the softer layers yield an excellent coke and are also valuable for gas making purposes. Some excellent coal is generally present wherever the horizon of this bed is above water level, the principal mines on the Upper Guyandotte, at Holden, Dingus Run, etc., being in this seam, while at Warfield, Rawl, and other points on the Tug the same bed appears to be present in commercial thickness as well as on all the tributaries of the upper waters of Big and Little Coal rivers. It is also a valuable coal across Nicholas and Webster though declining in thickness from 5 feet, its average on the Kanawha and southwestward, to 3 and 3½ feet in Webster and southeastern Braxton. For a fuller and detailed description of all the members of the Kanawha group, the reader is referred to Volumes II and II(a), and Bulletin Two, W. Va. Geological Survey.

Allegheny Series.

Immediately above the top of the Pottsville beds, there comes another series of sandy shales, coals, fire clays, sandstones, and occasionally one or more limestones, the whole rock formation having a thickness of 250 to 300 feet on the Allegheny river in western Pennsylvania where these strata were first studied and named the Allegheny series. There it contains in different regions, 6 or more coal horizons that furnish fuel of commercial value, as follows:

Upper Freeport (Thomas).
Lower Freeport.
Upper Kittanning.
Middle Kittanning.
Lower Kittanning (Davis).
Clarion.

Of these 6 beds that are mined at different points in Pennsylvania, only two, viz; the Upper Freeport and Lower Kittanning have been mined to any considerable extent in West Virginia, and of these the Lower Kittanning bed appears to be the most widely persistent and valuable. It is known under different local names in the several regions of the state, being often called the "Six-Foot" seam along the North Potomac river, the "Davis" seam at Thomas, and adjoining regions, the "Roaring Creek" bed in Randolph and Barbour, and the "No. 5 Block" throughout Clay, Nicholas, Fayette, Kanawha, and other counties in the southwestern regions of the state. It is generally of workable dimensions wherever its outcrop lies above drainage, and its wide distribu-

tion and uniform good quality render it one of the very valuable coal horizons of the state.

The coal differs in type greatly in the several regions as expressed in the chemical analyses now to be given, being lower in volatile matter in the mountain regions than in others. The following average of 5 analyses represents in a general way the character of the Lower Kittanning coal along the North Potomac river between Piedmont and Gorman:

Average 5 samples Lower Kittanning coal, North Potomac river.

	Per cent.
Moisture	1.81
Volatile Matter	14.79
Fixed Carbon	71.59
Ash	11.81
Total	100.00
Sulphur	2.62
Phosphorus	0.048
B. T. U. Calorimeter	13615

Another type of this coal is found further up the North Potomac toward its headwaters where the Davis Coal & Coke Company carries on extensive operations in the vicinity of Coketon, Tucker county, as illustrated by the following analysis of an air dried sample:

	Per cent.
Moisture	0.48
Volatile Matter	20.72
Fixed Carbon	72.29
Ash	6.51
Total	100.00
Sulphur	0.82
Phosphorus	0.02
B. T. U.	14500

Still another type of this same coal occurs in the Roaring Creek region of Randolph and Barbour counties as exhibited by the following analysis of an air dried sample of the same in which the volatile matter is higher:

	Per cent.
Moisture	0.74
Volatile Matter	30.38
Fixed Carbon	59.59
Ash	9.29
Total	100.00
Sulphur	1.65
Phosphorus	0.023
B. T. U.	13901

The No. 5 Block type of this coal which comes in toward the southwestern half of the state is represented by the following average of 6 samples as received from the mines:

	Per cent.
Moisture	1.81
Volatile Matter	33.17
Fixed Carbon	57.56
Ash	7.46
Totals	100.00
Sulphur	0.80
Phosphorus	0.009
B. T. U. Calorimeter	13536

Many of the mines on No. 5 Block coal show higher in B. T. U. than this average, and it is one of the splendid fuel coals of the state, always holding the market wherever it has been once introduced.

The Middle Kittanning coal of the Pennsylvania section appears to be united with the Lower one at most localities in West Virginia, and hence is not known as a separate bed.

The Upper Kittanning coal with a thickness of 3 to 4 feet, has been mined at only a few localities in the state, viz; in Monongalia, Preston, Taylor, Barbour, Randolph, Upshur and Lewis counties, and then only in a small way by the farmers, since it is always overshadowed by the thicker and more important bed (Lower Kittanning) 40 to 50 feet below. It is rather high in ash, 10-12 per cent, but will sometime furnish a large tonnage of fairly good fuel. It has been observed at only a few localities in the Kanawha region, one of which is at Crescent, Fayette county, where a bed of coal 4 feet thick has been mined at 58 feet above the No. 5 Block seam, and apparently the same seam has been opened on Kelly's creek by Mr. C. C. Lewis, where it is partly cannel at 45 feet above No. 5 Block.

The Lower Freeport coal is of very little economic importance in West Virginia, and has not apparently been mined for commercial shipment anywhere in the state, being generally thin and impure, and frequently absent from the section completely.

The Upper Freeport coal at the top of the Allegheny series is an important bed in the northern portion of the state across Preston and eastern Monongalia, and possibly in some portions of northern Barbour, as well as through Tucker and Mineral counties along the North Potomac coal basin, but southwestward from Barbour county this coal thins down to 1 to 2 feet or disappears entirely until we reach Lincoln county where in the region of Griffithsville and Hamlin it appears to thicken up to a bed of commercial value. It has been extensively developed on the waters of Deckers creek in Monongalia and Preston counties for coking purposes by the Elkins Coal & Coke Company, the Preston County Coal Company, and the Connellsville Basin Coal Company, as well as in the region of Newburg, Austen and Tunnelton, Preston county, where there are several large mines on this coal for coking, railway and other general fuel purposes. Quite recently the fuel from this bed in the Deckers creek region of Monongalia and Preston counties has come into high favor as a coal to mix with the low volatile coals of the Potomac basin in the manufacture of by-product coke, and a contract for a large daily tonnage of this coal covering a period of several years has been made to supply the by-product oven plant near Bethlehem, Pennsylvania.

Like the Kittanning below, the Upper Freeport bed is much lower in volatile matter in the Allegheny Mountain or North Potomac region than west of the same as will be observed by the following two types of analysis, being the average of 4 samples from each region:

	Allegheny Mountain Per cent.	Deckers Creek Per cent.
Moisture	1.44	1.46
Volatile Matter	14.60	29.53
Fixed Carbon	74.96	62.33
Ash	9.00	6.67
Totals	100.00	100.00
Sulphur	1.56	1.10
Phosphorus	0.02	0.03
B. T. U. Calorimeter	14621	14171

The volatile matter in the samples from the North Potomac basin, it will be noted, is only half that in the Deckers creek fields.

The Conemaugh Series.

The next succeeding group of rocks above the Allegheny is known as the Conemaugh series, and has a thickness of 550 to 600 feet in most regions of West Virginia, containing 6 or more coal horizons.

The upper two-thirds of the Conemaugh beds is composed largely of soft red shales which have a tendency to slide, giving much trouble and expense to the railways in cuttings, tunnels, etc., and also to the oil well drillers, since access of water converts them into mud which "caves" badly and frequently results in loss of drilling tools and the hole already drilled. The lower third however, consists mostly of massive sandstones (Buffalo and Mahoning) which often furnish good building stone, and when deeply buried may hold considerable quantities of oil and gas.

The coal horizons of the Conemaugh are the following in descending order:

Little Pittsburg.
Little Clarksburg.
Elk Lick.
Harlem.
Bakerstown.
Brush Creek.

The only coals of the Conemaugh series that attain any considerable economic importance are the Brush creek, which comes 50 to 80 feet above the Upper Freeport, the Bakerstown, which comes 180 to 200 feet above the Upper Freeport bed, and the Elk Lick coal 160 to 180 feet higher. The Harlem coal has occasionally been mined by the farmers for local use, but it is generally only 1 to 2 feet thick and often absent entirely.

The Brush creek bed attains some importance in Hancock county where it has been mined for commercial purposes, and exhibits the following composition on Hardin run, near New Cumberland:

	Per cent.
Moisture	1.15
Volatile Matter	36.38
Fixed Carbon	56.55
Ash	5.92
Total	100.00
Sulphur	1.45
Phosphorus	0.005

The Bakerstown coal which belongs 100 to 120 feet above the Brush Creek bed is quite widely distributed, and frequently attains commercial value in Preston, Barbour, Mineral, Braxton, Upshur Brooke and other regions of the state. Its composition in the different districts is shown by the following analyses:

	Mineral County. Per cent.	Preston County. Per cent.	Lewis County. Per cent.	Brooke County. Per cent.
Moisture	1.59	1.05	1.31	0.78
Volatile Matter	14.91	28.35	36.71	41.25
Fixed Carbon	73.17	63.45	55.01	52.36
Ash	10.33	7.05	6.97	5.61
Totals	100.00	100.00	100.00	100.00
Sulphur	2.30	2.48	0.88	3.15

The increase in volatile matter with distance from the Allegheny Mountain region represented by the Mineral county sample, is well illustrated by these analyses. The coal is seldom more than 3 feet thick, but is highly prized both for steam and domestic purposes.

The Elk Lick coal which comes about 150 to 180 feet above the Bakerstown bed, and like it only about 3 feet thick, is occasionally of some importance, but is generally quite high in ash, containing 15 to 20 per cent of the same. It is mined occasionally for local use, and was once opened for commercial purposes on the Coal & Coke Railway near Jacksonville, Lewis county, where it has the following composition:

	Per cent.
Moisture	1.73
Volatile Matter	37.17
Fixed Carbon	46.15
Ash	14.95
Total	100.00
Sulphur	2.48
Phosphorus	0.106
B. T. U.	13276

Monongahela Series.

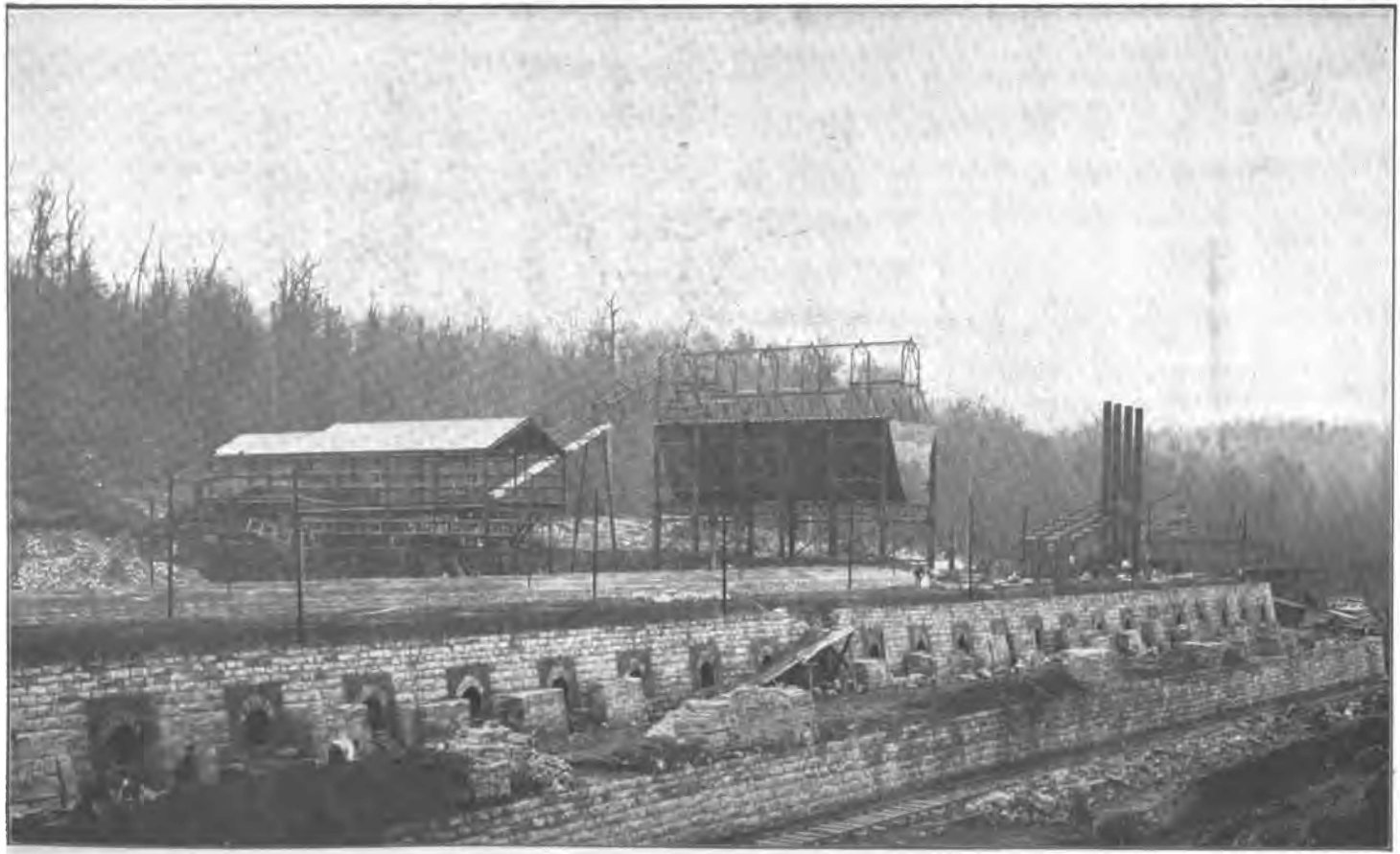
The last and highest series of rocks to hold valuable commercial coals is the one which crops so extensively along the Monongahela river drainage between Weston, Clarksburg, Fairmont, Morgantown, Brownsville and Pittsburg, and therefore bears the name of that great freight producing stream which carries on its bosom more annual tonnage than any other stream in the world.

The Monongahela series varies in thickness from 300 to 430 feet, having the great Pittsburg bed at its base and the Waynesburg coal at its top with the Redstone, Sewickley, and Uniontown coal beds intermediate at 40, 100 and 250 feet respectively above the base of the series.

The Pittsburg Coal.

The main coal bed of the Monongahela series is the one which forms its base, and of which the writer gave the following description in 1897 in his vice-presidential address before Section E of the American

PITTSBURG COAL OUTCROP (near Connellsville, Pa.).
Showing Columnar Structure of Typical Coking Coal.



Coke Ovens, Steel Tipple and Slack Bins (Coalton, Randolph County).

Association for the Advancement of Science at its Madison, Wisconsin, meeting:

"Among the rich mineral deposits of the great Appalachian field, the Pittsburg coal bed stands preeminent. Other coal beds may cover a wider area, or extend with greater persistence, but none surpass the Pittsburg seam in economic importance and value. It was well named by Rogers (H. D.) and his able assistants of the first Geological Survey of Pennsylvania, in honor of the city to whose industrial growth and supremacy it has contributed so much. Whether or not the prophetic eye of that able geologist ever comprehended fully the part which this coal bed was to play in the future history of the city which gave it a name we do not know; but certain it is that the seven feet of fossil fuel which in Rogers' time circled in a long black band around the hills, and overlooking the site of Pittsburg from an elevation of 400 feet above the waters of the Allegheny and Monongahela, extended up the latter stream in an unbroken sheet for a distance of 200 miles, has been the most potent factor in that wonderful modern growth which has made the Pittsburg district the manufacturing center of America, and which bids fair to continue until it shall surpass every other district in the world, even if it does not now hold such primacy."

This was written 15 years ago and the prophecy there made has long been more than fulfilled, since the Pittsburg district has been recognized as the greatest manufacturing district in the world for more than 10 years, and made so almost entirely through the agency of the great coal bed in question. Pennsylvania and West Virginia had in 1908 practically equal areas, viz; about eleven hundred thousand acres each of this great bed, but Pennsylvania is exhausting her field at the rate of 100,000,000 million tons, or 12,500 acres annually, so that 50,000 acres or nearly one-twentieth of her entire Pittsburg coal area has been mined in only four years. West Virginia in the same four years has mined only about 50,000,000 tons from her Pittsburg coal area, representing but 6,250 acres of exhausted territory. Of course, the production from both areas will gradually increase as the years pass, but it is evident that West Virginia will still have a large area of this splendid fuel long after that from her sister states of Pennsylvania and Ohio is practically gone, only 40 to 50 years hence.

The quality of the Pittsburg coal varies considerably in the different regions of the state, and also much in the same region, but the following general averages of air dried samples will fairly represent the regions mentioned:

	Mois.	V.M.	F.C.	Ash.	Sul.	Phos.
Monongahela river region	0.75	38.16	54.64	6.45	2.30	0.0117
Ohio, Brooke and Marshall	0.93	39.46	51.35	8.26	3.86	0.0067
Mason county	1.88	40.21	47.78	10.13	2.20	0.0160
Putnam and Kanawha counties	1.83	38.76	51.86	7.55	1.72	0.0450
Gilmer and Braxton counties	1.87	38.51	52.50	7.15	2.64	0.0140

The average of 52 mines, the results of many analyses by Mr. Frank Haas, formerly Chief Chemist of the Fairmont Coal Company, gave this coal for the Monongahela river region the following composition:

	Per cent.
Moisture	1.43
Volatile Matter	37.47
Fixed Carbon	53.83
Ash	7.27
Total	100.00
Sulphur	2.59
B. T. U. Calorimeter	14014

Out side of restricted areas where narrow belts of low sulphur Pittsburg coal exist, like that extending from the West Fork river in Marion cunty near Monongah northeastward toward Underwood or Farmington on Buffalo creek, the above averages of Mr. Haas may be considered as fairly representative of the Pittsburg coal in the region drained by the waters of the Monongahela and its tributaries in West Virginia, while the following average of 11 samples from the different portions of the Chatam mine of the Jamison Coal & Coke Company near Underwood, Marion county, will represent the low sulphur type of restricted areas:

	Per cent.
Moisture	1.32
Volatile Matter	35.79
Fixed Carbon	56.11
Ash	6.27
Total	100.00
Sulphur	1.05

An ideal steam and domestic fuel, the purer portion of the seam being unexcelled for gas and coking purposes, this three-fold use to which the Pittsburg bed is so well adapted renders it one of the most valuable single deposits of the entire Appalachian coal field, and hence the large and almost virgin area of the bed remaining unmined in West Virginia must prove a very rich heritage and one that should attract many additional factories to her domain in the near future.

The Redstone Coal.

This bed belongs about 40 feet above the Pittsburg seam, and resembles the latter very much in chemical composition. Aside from a small area in Monongalia county on Robinson run, its chief development in commercial thickness is found in southeastern Harrison, western Barbour, northern Upshur, and portions of Lewis county. That the character of the coal is very much like the Pittsburg is shown by the following analysis of the bed at the Century Mine, Barbour county:

	Per cent.
Moisture	0.67
Volatile Matter	36.89
Fixed Carbon	55.41
Ash	7.03
Total	100.00
Sulphur	2.43
Phosphorus	0.009

This bed will furnish a large tonnage of splendid fuel from the regions indicated.

Sewickley Coal.

Lying 60 to 80 feet above the Redstone seam and 100 to 120 feet above

the Pittsburg bed there occurs another valuable coal bed which underlies practically all of Monongalia and Marion counties west from the Monongahela river, the northern half of Wetzel and nearly all of Marshall and Ohio counties with a thickness of 3½ to 5 feet of very excellent fuel of the approximate composition shown by the analysis of a sample of coal taken from the Parker Run Mine just below Rivesville, Marion county, as follows:

	Per cent.
Moisture	1.47
Volatile Matter	38.34
Fixed Carbon	51.79
Ash	8.40
Total	100.00
Sulphur	3.47
Phosphorus	0.005
B. T. U. Calorimeter	14142

The heating value of the Sewickley coal is equal to or even superior to that of the Pittsburg bed and although it holds about one per cent more sulphur, this extra amount does not appear to interfere with its splendid steaming and domestic fuel uses. It will furnish a large quantity of valuable fuel when active mining operations begin on this bed in the not distant future.

The Uniontown Coal.

At 100 to 150 feet above the Sewickley seam there is frequently found another coal which attains some importance over limited areas in Wetzel, Marion, Tyler, Doddridge and Lewis counties, having practically the same chemical composition as the Pittsburg coal in the Wheeling region, except that it is slightly higher in sulphur. It will probably yield a half billion or more tons of fairly good fuel coal in the counties mentioned.

The Waynesburg Coal.

The Monongahela series ends at the top with a bed of coal which has a good thickness in western Monongalia, and Marion, and is 3 to 3½ feet thick over about half of Wetzel, and much of Marshall and Ohio counties. It is a low grade fuel, however, being high in ash, sulphur, and moisture, compared to the Sewickley, Redstone and Pittsburg coals. It will eventually be mined, however, and will furnish many hundred million tons of fuel.

The Dunkard Series.

Capping the Monongahela series with its rich deposits of coal, especially in the northern half of the state, there occurs another series of sandstones, shales, and thin limestones in which several thin beds of coal occur, only two of which ever attain commercial value. These are the Waynesburg "A" bed, at 80 to 90 feet above the base of the series, and the Washington coal 80 to 90 feet higher. This last coal is very widely distributed and often has 1½ to 2 feet of good coal with 3

to 4 feet more of low grade fuel. It will probably be the last coal to be mined in the state and will furnish many hundred million tons of low grade fuel.

For detailed descriptions and analyses of all the coal beds in the state, as well as estimates of the total quantity (160 billion short tons) in the several counties, the reader is referred to the publications of the W. Va. Geological Survey, and especially to the County Reports in which detailed estimates are given for the tonnage of each bed.

Production of Coal in West Virginia.

The following table gives the annual production of coal in the state since 1863, the first year in which statistics are available:

Year.	Quantity. (Short tons)	Year.	Quantity. (Short tons)
1863	444,648	1888	5,498,800
1864	454,888	1889	6,231,880
1865	487,897	1890	7,394,654
1866	512,068	1891	9,220,665
1867	589,360	1892	9,738,755
1868	609,227	1893	10,708,578
1869	603,148	1894	11,627,757
1870	608,878	1895	11,387,961
1871	618,830	1896	12,876,296
1872	700,000	1897	14,248,159
1873	1,000,000	1898	16,700,999
1874	1,120,000	1899	19,252,995
1875	1,120,000	1900	22,647,207
1876	896,000	1901	24,068,402
1877	1,120,000	1902	24,570,826
1878	1,120,000	1903	29,337,241
1879	1,400,000	1904	32,406,752
1880	1,829,844	1905	37,791,580
1881	1,680,000	1906	43,290,350
1882	2,240,000	1907	48,091,583
1883	2,335,833	1908	48,197,843
1884	3,360,000	1909	51,849,220
1885	3,369,062	1910	61,671,019
1886	4,005,796	1911	59,831,580
1887	4,881,620		
Total			649,448,201

It is interesting to compare the total coal production of West Virginia with that of the entire United States and with that of the states which adjoin her territory in he Appalachian field. The following statistics are from the U. S. G. Survey Mineral Statistics as compiled by Mr. E. W. Parker for 1911:

	Short Tons.
Total Production of Coal in the United States, including Anthracite, since statistics were available in 1814	8,739,572,427
Pennsylvania, since 1820 — anthracite, 1,819,350,685 — bituminous, 2,396,491,260	4,215,841,945
West Virginia, since 1863	649,448,201
Ohio, since 1838	611,949,292
Kentucky, since 1828	171,678,669
Maryland, since 1820	165,909,802
Virginia, since 1822	79,613,075

These tables show that Pennsylvania lacks only 154 million tons in round numbers of having produced one-half of the entire output of coal in the United States up to and including 1911, while West Virginia, which did not become a coal producer of record until 1863, has already greatly outstripped Ohio, whose production began 25 years earlier, and whose annual production for the past year (30,759,986 short tons) is only slightly more than half that of West Virginia's (59,831,580 short

tons). This comparison with the production of coal in the sister states of Kentucky, Maryland, and Ohio, as well as with the mother state, Virginia, accentuates the prominence that West Virginia is sure to assume in the coal industry, being second now to Pennsylvania and almost certain to exceed her in the production of bituminous coal within the next two decades.

Altogether, including the inevitable waste, about one billion short tons of the 160 billion tons of coal that West Virginia is credited with having had in her hills before mining operations began has been taken out, so that her supply is diminished by only a small fraction of the total.

Water Power Resources of West Virginia*

By A. H. Horton, District Engineer, Water Resources Branch, U. S. Geological Survey.

The state of West Virginia is rich in many natural resources, among the more important are coal, oil, gas, lumber and water power. At the present time probably the least undeveloped and the least utilized of these natural resources is water power. The time, however, is approaching when the development of the large amount of water power within the state will be undertaken and carried out to the economic limit. This time may be in the near or distant future. Every improvement in the electrical transmission of power, every devise built to render the use of electricity more convenient and desirable, and every demand for power hastens the day of the complete development of water power. Any great or radical improvement in the production of electrical energy or its transmission would have an immediate effect upon the development of water power.

According to the tables which follow, the minimum amount of energy developed by the streams in West Virginia is about 350,000 horsepower, the assumed maximum is 1,163,000 horsepower. It takes from 11 to 15 tons per year of high grade steam coal to produce one continuous horsepower in the most efficient steam engines in ordinary use. The amount of coal ,based upon the lower of the above figures, necessary to produce the minimum horsepower developed by West Virginia streams is therefore 3,850,000 tons per year, to produce the maximum 12,800,000 tons per year.

The annual cost of producing power by steam plants varies from about $25 to $150 per horsepower, depending upon the type of engine and boiler and the capacity of the plant. These figures include interest at

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*This timely and valuable paper was prepared through the courtesy of Dr. Geo. Otis Smith, Director of the U. S. Geological Survey, and at the request of Dr. I. C. White, State Geologist.

5 per cent, depreciation, repairs, oil, waste, labor, and fuel, using coal at $2 per ton.

Water power must, of course, compete with steam power derived, in general, from coal. It will therefore remain undeveloped unless it can be disposed of at less cost, except to certain customers who will pay a higher price for the convenience of obtaining electrical power.

It costs from about $45 to $200 per horse power measured at the turbine shaft to construct water power plants ready to deliver electrical power. This electrical power can be sold for less in the immediate vicinity of the power plant than anywhere else as the cost of transmission is considerable and varies with the distance, voltage, and amount transmitted.

To prevent a threatened water power monopoly and reduce rates for electricity the province of Ontario, Canada, created a Hydro-Electric Power Commission in 1906 with full power to control plants and to buy and sell power. This commission is now operating 300 miles of 110,000 volt main transmission lines, and 180 miles of distributing lines buying current from the Ontario Power Company, a private corporation at Niagara Falls, at $9 per horsepower per annum. The rates charged the municipalities to cover cost vary from $18 to $29.50 per horsepower per annum, according to distance from Niagara Falls. The commission is supplying power at present to thirty municipalities. The city of Toronto, located approximately 90 miles from the source of power, purchases 10,000 horsepower from the commission for $18.50 per horsepower per annum for 24-hour service, which is very much less than it would cost if produced by steam plants.

What has been done in Ontario, Canada, can be done in West Virginia or any other state. At present there is very little hydro-electric power developed in this state and the passing laws to regulate the price of electricity for use as power or for illumination ought not to be a difficult matter. The need of legislation or of a commission to regulate the charges for electricity is shown by the fact that at Buffalo electricity costs $25 per year per horsepower while at Toronto, which is three times as far from Niagara Falls, the common source of power, the price is about 26 per cent less.

Sources of Data.

The runoff data used in this report have been obtained from the reports and files of the Water Resources Branch of the U. S. Geological Survey. Table No. 1 shows the gaging stations and the length of record at each that have been or are being maintained in West Virginia upon which the runoff data used are based. On those streams where there were no runoff records available, a runoff coefficient was assumed based upon that of the nearest station or on that of a stream under about similar conditions.

The profiles and elevations were obtained from river surveys made by the U. S. Geological Survey and U. S. Army Engineers, and from the topographic maps of the U. S. Geological Survey. It should be noted that there are profiles available from river surveys for the following streams

only: Kanawha, Little Kanawha, Potomac, North Branch Potomac, South Branch Potomac and Big Sandy Rivers. The contour interval of the topographic maps is 20, 50, or 100 feet, depending upon the nature of the topography. Elevations taken from topographic maps may therefore be subject to considerable error, depending upon the contour interval of the map used.

The estimates of power were taken from the computations and compilations made for Forest Service Circular No. 143, U. S. Department of Agriculture, January 1908, and for the Report of the National Conservation Commission, February 1909. The estimates for the Potomac river are the same as in Circular No. 143 except only those streams in West Virginia are considered, and the efficiency of the turbines was taken as 90 per cent instead of 80 per cent. The estimates for the other streams in West Virginia have been revised from that compiled for the above reports, due to being based on runoff data secured during 1908-1911. The data with reference to storage reservoirs and the amount of power to be obtained from the use of stored water were taken from Circular No. 143 except that the efficiency of the turbines was taken as noted before.

TABLE NO. 1. GAGING STATIONS IN WEST VIRGINIA.

Stream	Location	Length of Record
Ohio River Drainage.		
Bluestone River	Lilly	Aug. 22, 1908—Jan. 13, 1912
		July 21, 1912—Nov. 7, 1912
		Jan. 15, 1913—March 31, 1913
Bluestone River	True	Oct. 17, 1911—Jan. 2, 1913
Buckhannon River	Hall	June 7, 1907—May 25, 1909
Buffalo Creek	Barracksville	June 3, 1907—Dec. 31, 1908
Cheat River	Morgantown (near)	July 8, 1899—Dec. 30, 1899
		July 1—Dec. 29, 1900
		Aug. 21, 1902—Dec. 31, 1905
		Nov. 18, 1908—March 31, 1913
Cheat River	Parsons (near)	Dec. 20, 1912—March 31, 1913
Cherry River	Richwood	July 3, 1908—March 31, 1913
Coal River	Brushton	June 23, 1908—March 31, 1913
Coal River	Fuqua	Oce. 12, 1911—March 31, 1913
Coal River	Tornado	June 24, 1908—June 3, 1912
Elk Creek	Clarksburg (near)	Oct. 11, 1910—March 31, 1913
Elk River	Clendenin	June 27, 1908—March 31, 1913
Elk River	Gassaway	July 1, 1908—March 31, 1913
Elk River	Webster Springs	July 1, 1908—March 31, 1913
Gauley River	Allingdale	July 3, 1908—March 31, 1913
Gauley River	Belva	Aug. 25, 1908—March 31, 1913
Gauley River	Summersville	July 6, 1908—March 31, 1913
Greenbrier River	Alderson	Aug. 1, 1895—July 15, 1906
		May 10, 1907—March 31, 1913
Greenbrier River	Marlinton (near)	July 9, 1908—March 31, 1913
Meadow River	Russellville (near)	July 17, 1908—March 31, 1913
New River	Fayette	July 29, 1895—May 22, 1901
		Aug. 11, 1902—Dec. 31, 1904
		July 16, 1908—March 31, 1913
Pocotaligo River	Sissonville	June 26, 1908—March 31, 1913
Shavers Fork River	Parsons	Oct. 14, 1910—March 31, 1913
Tygart River	Belington	June 5, 1907—March 31, 1913
Tygart River	Fetterman	June 3, 1907—March 31, 1913
West Fork River	Enterprise	June 2, 1907—Mar. 31, 1913
Potomac River Drainage.		
North Branch of Potomac River	Piedmont	June 27, 1899—July 16, 1906.
North Branch of Potomac River	Cumberland, Md. (near)	June 11, 1894—Nov. 20, 1897.
Opequon Creek	Martinsburg (near)	May 8, 1905—July 16, 1906.
Potomac River	Great Cacapon	June 21, 1894—March 7, 1896.
Shenandoah River	Millville	April 15, 1895—March 31, 1909.
South Branch of Potomac River	Springfield (near)	June 3, 1894—Feb. 29, 1896.
		June 26, 1899—Feb. 2, 1902.
		Aug. 28, 1903—July 15, 1906.
Tuscarora Creek	Martinsburg	May 8, 1905—Dec. 31, 1905.

Water Power.

The schedule presented in this report gives the amount of available water power according to three classifications—(1) that which may be produced by the minimum flow; (2) the assumed maximum development; and for a few selected streams (3) the power that may be developed from storage capacity in the upland basins and using stored water to compensate the low water periods. The data as a whole have been considered without reference to present practicability of development or present market. For purposes of this report it has been assumed that all the power in West Virginia will some day be required. Such an interpretation is the logical one when natural resources are being considered. In other words, the schedule here presented must be interpreted for the future rather than for the present. The reader should not assume that all the power here shown is economically available today. Much of it, indeed, would be too costly in development to render it of commercial importance under the present conditions of market and the price of fuel power. The schedule shows therefore what will be the maximum possibilities in the day when our fuel shall have become so exhausted that the price thereof for production of power is prohibitive, and the people of the country shall be driven to the use of all the water power that can reasonably be produced by the streams.

The rivers have been divided into sections of varying length, determined by channel slope, and the fall and flow of each section have been obtained from the best available source of information. In determining the flow for the various sections the data of flow per square mile, procured from the sources above mentioned, have been applied. The drainage areas above the upper and the lower limits of each section have been determined and a mean taken for the whole section. This has been used as a factor along with the flow per square mile in determining the minimum flow for that section. This figure, together with 90 per cent of the total fall from head to foot, has been used to determine theoretical horsepowers, according to the usual formulas. It is obvious that in practice the entire fall along any stretch of river or at any power privilege cannot be effectively utilized. In few places can even 90 per cent be utilized at the present time; but, inasmuch as these figures are supposed to cover future as well as present practice, and inasmuch as it may reasonably be assumed that future practice in water power installation will improve, it is believed that 90 per cent of the fall along any particular section may eventually be realized. Where a stream has been considered from its source to its mouth but 25 per cent of the power obtained by using the total fall and the flow at the mouth has been used, other factors being the same.

The results of calculations of theoretical power on 90 per cent total fall have been reduced 10 per cent to allow for inefficiency of wheels. It is recognized that 90 per cent efficiency is too high to be used in calculations of power at the present time, 75 or 80 per cent being the usual installation maximum. Here again, however, we are computing

for future conditions, as well as present ones, and it may confidently be expected that, with the improvement of turbines, a greater percentage of the theoretical power will be realized on the shaft and improvements will before long render possible a 90 per cent efficiency.

In determining the minimum horsepower, the average of the mean flow of the two lowest seven-day periods in each year was determined and the mean of these values for the period of record was taken as the minimum flow. It is obvious that this is somewhat higher than the absolute minimum, but the latter is usually of so short duration that it does not equal the practicable minimum that may profitably be installed.

The assumed maximum economical development has been determined on the assumption that it is good commercial practice to develop wheel installation up to that amount the continuance of which can be assured during six months of the year, on the assumption that the deficiency in power during the remainder of the year can be profitably provided by the installation of fuel power plants as auxiliaries. In many parts of the country it has been shown conclusively that it is economical to develop up to that amount which can be had continuously during the highest four months of the year, and, while it is probable that there are parts of the country where the limit should be the highest eight or ten months, it is believed that the period used in these schedules is a very conservative average. The minimum weekly flow for each month of the year has been arranged according to magnitude, and the sixth value has been taken as the basis for estimating the power, the mean of these values for the record period in each case being that used in the computations.

The subject of storage was not investigated to any extent, as it was realized that any study of storage possibilities would involve field investigations of possible reservoir sites and a careful study of hydrographs of the different streams in order to determine the most economical capacity of any reservoir or group of reservoirs. Storage, however, in connection with water power on West Virginia streams is a very important question and should be carefully considered in any proposed development. The topography of the streams at the headwaters, and at many places farther down, is especially favorable for construction of reservoirs of large capacity. The data in this report in regard to storage were taken from Circular No. 143 previously mentioned.

In making the following estimates of the water power resources of West Virginia the streams were considered under the two main drainage systems into which the state is divided. The total area of the state is 24,645 square miles; of this area 21,160 square miles or 86 per cent drain into the Ohio river; the remainder, 3,485 square miles, drain into the Atlantic ocean.

Under the Ohio river drainage the amount of power in the following drainage basins was computed: New-Kanawha river drainage in West Virginia, Tables Nos. 2 to 10, show that the total amount of power on the New-Kanawha river and tributaries is 246,037 horsepower for a

minimum and 724,192 for a maximum. It is of interest to note that of this amount 196,200 and 464,300 for a minimum and maximum, respectively, are on the main stream alone.

The Tygart-Monongahela drainage basin was considered next, Tables 12 to 15 show a minimum of 38,171 and a maximum of 145,335 developed by the streams in this basin.

The amount of power on the other tributaries of the Ohio river was next computed. The more important of these are the Little Kanawha and the Big Sandy. Tables Nos. 17 to 20 show that the minimum and the maximum amount of power on these two streams and their tributaries and on the minor tributaries of the Ohio is 12,778 and 104,219 horsepower respectively. The Tug Fork and Big Sandy rivers form the boundary line between Kentucky and West Virginia. Only the power on the main stem of these two streams and on the tributaries in West Virginia was included in the amount of power in West Virginia. The power developed by the Ohio river along West Virginia has not been considered as the development of this power is a problem which may not be solved for a long time.

The total power in the Ohio river drainage in West Virginia is 296,986 horsepower for the minimum and 973,746 for the maximum.

The Potomac river is the only stream draining into the Atlantic ocean part of whose basin lies in West Virginia. Tables No. 21 to 24 show that there is a minimum of 52,595 horsepower and a maximum of 189,238 developed by the streams in this drainage basin in West Virginia. The North Branch and the Potomac river form the boundary line between Maryland and West Virginia as far down as Harpers Ferry; only the power on the main stem of these two streams and on their tributaries in West Virginia was considered as being in the state. The following shows the amount and distribution of the indicated horsepower developed by West Virginia streams:

	Minimum Horsepower.	Assumed Maximum. Horsepower.
Ohio River Drainage:		
New-Kanawha Drainage Basin—Tables 2-10	246,037	724,192
Tygart-Monongahela River—Tables 12-15	38,171	145,335
Other Ohio River Tributaries—Tables 17-20	12,778	104,219
Atlantic Drainage:		
Potomac River Drainage in West Virginia—Tables 21-24	52,595	189,238
Totals	349,581	1,162,984

Ohio River Drainage

New-Kanawha River.

The New-Kanawha river is the largest and most important river in West Virginia. Its basin comprises about one-third of West Virginia, part of western Virginia, and a small part of North Carolina. The

lower part of the river, below the mouth of the Gauley, is called the Kanawha; above this point it is called the New. New River is formed by the union of the North and South Forks a few miles south of the boundary of North Carolina. Considering the South Fork as the main stream, the river rises in the central part of Watauga county, near Boone, North Carolina, whence it flows northeastward across the state line into Virginia; at Radford, Virginia, the river turns abruptly and flows northwestward across West Virginia and empties into the Ohio river at Point Pleasant. The total length of the river is 427 miles, of which 180 miles are in West Virginia. Its total area is 12,197 square miles, of which 8,550 square miles, or 70 per cent, are within the state of West Virginia.

The sources of the New lie in the Appalachian mountains among the high ridges which separate this basin from the basins of the Pedee and Santee rivers which drain into the Atlantic ocean. The river crosses the Allegheny front near the Virginia-West Virginia state line. Below the state line the valley of the main stream is narrow. From Hinton to the mouth of the Gauley the stream is in a steep and narrow canyon. Below the mouth of the Gauley the valley begins to widen out; from Charleston down, the valley is wide and the slope of the stream is small.

The more important tributaries are the Greenbrier, Gauley, Elk, and Coal rivers, all of which, except the Coal, are tributary from the right bank.

The elevation of the sources of the river is about 3,700 feet; at the Virginia-West Virginia state line the elevation is about 1,500 feet; at the mouth the elevation is about 510 feet. The average fall in West Virginia is approximately 5.5 feet per mile. In the stretch from Hinton to the Gauley river the average fall is close to 11 feet per mile.

The average rainfall at the headwaters is probably 60 inches or more, as the sources are located in the region of the greatest rainfall in eastern United States. The headwaters of the main stream and of the more important tributaries in West Virginia are forested to a considerable extent.

The Allegheny-Kanawha coal formation and the New river-Pocahontas coal formation underlie probably two-thirds of the basin in West Virginia, passing across the basin in a generally northeast and southwest direction. The main river enters the latter area at about Glade and Laurel creeks and leaves at the mouth of the Gauley where the former area begins and continues to Charleston.

The Chesapeake and Ohio railroad parallels the river from Hinton to St. Albans, and the Kanawha and Michigan railroad runs from the mouth to the Gauley river. The Virginian railroad strikes the river at Deepwater by coming down Loup creek. The lower 96 miles of the river have been made navigable by means of locks and dams. The lock farthest upstream is located at Montgomery, about 84 miles above the mouth.

On account of the high rainfall at the sources and the comparatively large drainage area the flow of the river in West Virginia is considerable;

this, in conjunction with its rapid fall, makes the New-Kanawha river capable of developing a large amount of water power. Table No. 2 shows that there are nearly 200,000 horsepower for a minimum, and 460,000 horsepower for a maximum developed by the main stream from the Virginia state line to Ohio river backwater. In the stretch from the Virginia line to above the mouth of the Greenbrier there is no railroad and conditions are favorable for development. From Hinton to the head of navigation (Loup Creek Shoal) the topography and rapid fall are favorable but construction would probably be expensive as the Chesapeake and Ohio railroad parallels the river, and for a portion of the way on both sides of the river just above high water. The amount of power along the navigable portion of the river is considerable and it may be developed at some future time should the value of the power warrant the cost of constructing the necessary structures for developing it. Table No. 10 gives the power on the more important minor tributaries of the New-Kanawha river in West Virginia.

TABLE NO. 2.—INDICATED HORSEPOWER DEVELOPED BY NEW-KANAWHA RIVER IN WEST VIRGINIA.

Section of River.									Horsepower Available from storage for		
From	To	Length mi.	Mean Drainage Area. sq. mi.	Minimum Discharge. sec. ft	Assumed Discharge for maximum Development. sec. ft.	Total Fall in Feet.	Minimum Horsepower.	Assumed Maximum Development. Horsepower.	12 mo's.	6 mo's.	3 mo's.
Below Island Creek	Above Greenbrier R.	20	4,220	1,990	3,810	77	14,000	26,000	.....	.....	.....
Below Greenbrier R.	1,200 ft. Contour	20	6,300	2,140	5,000	182	35,900	84,000	3,480	6,960	13,920
1,200 ft. Contour	1,000 ft. Contour	24	6,560	2,230	5,200	200	41,000	95,600	3,830	7,660	15,320
1,000 ft. Contour	Above Gauley R.	19	6,780	2,300	5,380	351	74,300	174,000	6,730	13,460	26,920
Below Gauley R.	Foot Loup Cr. Shoals	9	8,310	2,550	6,440	51	12,000	30,300	16,700	33,400	66,800
Foot Loup Cr. Shoals	Ohio R. Backwater	71	10,100	2,730	7,690	76	19,000	53,600	24,900	49,800	99,600
Totals		163				937	196,200	464,300	55,640	111,280	222,560

Tributaries of the Kanawha River.

The Greenbrier, Gauley, Elk, and Coal rivers are the more important tributaries of the Kanawha river in West Virginia. The headwaters of the three former and of the Cheat, Tygart, and Little Kanawha are all adjacent to each other in the east-central portion of the state, so that the rainfall, forestry conditions, and the topographical features already described for the sources of the Cheat and Tygart rivers apply to the other streams which have their headwaters in this area. An examination of a map of the state will show how remarkably the tributaries of these six rivers are interlaced. The Coal river is located on the south side of the Kanawha while the other tributaries are on the north side.

Greenbrier River.

The drainage basin of the Greenbrier river lies in the eastern part of the main body of the state, being separated from the drainage of the Atlantic on the east by the Allegheny mountains, along whose crests is located the West Virginia-Virginia state line, and from the Cheat river drainage on the west and north by Shavers mountain and short lateral ranges. The area of the drainage basin is about 1,580 square miles.

The river rises in the northern end of Pocahontas county, flows in a southwesterly direction across Pocahontas and Greenbrier counties and joins the New river just above Hinton in Summers county.

The elevation of the sources is about 3,800 feet; the average slope from East Fork to the mouth is about 12 feet to the mile.

The basin is remarkable on account of being long and of nearly uniform width from the source to the mouth.

The principal tributaries are North Fork, Knapp, Anthony, Howard, Second, and Muddy creeks.

The Chesapeake and Ohio railroad parallels the river from the mouth to Durbin, from which point the Western Maryland continues on up the West Fork over the divide into the basin of the Cheat. There is no coal found in the basin of the Greenbrier, although the New river-Pocahontas formation occurs in the adjacent basin on the west.

Table No. 3 and Table No. 4, respectively, give the power on the Greenbrier and on the tributaries of the Greenbrier.

TABLE NO. 3.—INDICATED HORSEPOWER DEVELOPED BY GREENBRIER RIVER.

SECTION OF RIVER									Horsepower available from storage for		
From	To	Length mi.	Mean Drainage Area. sq. mi.	Minimum Discharge sec. ft.	Assumed Discharge for Maximum Development. sec. ft.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Development. Horsepower.	12 mo's.	6 mo's.	3 mo's.
Source	Below East Fork	18	a130	21	53	1,000	483	1,220	.....	.....	.....
Below East Fork	Above North Fork	13	148	25	60	260	598	1,430	.....	.....	.....
" North "	" Knapp Cr.	21	326	54	132	c310	1,540	3,760	7,540	15,100	30,200
" Knapp Cr.	" Anthony Cr.	40	670	87	271	b300	2,400	7,840	6,820	13,600	27,200
" Knapp Cr.	" Second Cr.	23	1,100	122	446	b220	2,470	9,020	21,400	42,800	85,600
" Second Cr.	Mouth	36	1,460	133	590	260	3,180	14,100	34,400	68,800	137,600
Totals		151				2,350	10,671	37,010	70,160	140,300	280,600

a. Total area. *b.* Fall reduced to 145 ft. by proposed Lewisburg reservoir. *c.* Fall reduced to 160 ft. by proposed Pocahontas reservoir.

TABLE NO. 4.—INDICATED HORSEPOWER DEVELOPED BY TRIBUTARIES OF GREENBRIER RIVER.

STREAM.								
FROM	TO	Length mi.	Drainage Area at Mouth. sq. mi.	Minimum Discharge. sec. ft.	Assumed Discharge for Maximum Development. sec. ft.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Development. Horsepower.
No. Fk. Greenbrier Source	Mouth	15	87	14	35	1,500	483	1,210
Knapp Creek Source	Mouth	27	121	20	49	1,300	598	1,470
Anthony Creek Source	Mouth	25	148	25	60	1,200	690	1,660
Howard Creek Source	Mouth	18	90	15	36	1,000	345	828
Second Creek Source	Mouth	24	120	20	48	1,500	690	1,660
Muddy Creek Source	Mouth	16	70	12	28	1,000	276	644
TOTALS							3,082	7,472

Gauley River.

The basin of the Gauley river is bounded on the east by that of the Greenbrier and on the north and west by that of the Elk. The area of the drainage basin is about 1,430 square miles.

The river rises in the western part of Pocahontas county, flows in a southwesterly direction across Webster and Nicholas counties and joins New river at its junction with the Kanawha.

The elevation of its sources is about 4,000 feet. The average slope of the river from Williams river to the mouth is about 20 feet to the mile.

The basin is triangular in shape. Most of the tributaries are in the eastern part of the basin, the main stream being located near the yestern side. The principal tributaries are Williams, Cranberry, and Cherry rivers, Muddlety and Hominy creeks, Meadow river and Twenty-mile creek.

The Chesapeake and Ohio railroad parallels the river from the mouth to Belva. The Baltimore and Ohio strikes the river near Camden on Gauley and parallels the river to Cherry river up which it goes to Richwood.

The New river-Pocahontas and the Allegheny-Kanawha coal formations occur throughout the basin, the former being on the east side of the main river and the latter on the west side of the river. Coal is mined on Twenty-mile creek and along the river below Belva.

From the Cherry river to Belva there is no railroad along the river, which is favorable for the construction of high dams as there would be no costs for relocation of railroads. This fact is also a disadvantage in getting construction material and equipment to dam sites.

Table No. 5 and Table No. 6, respectively, give the amount of power on the Gauley river and on the tributaries of the Gauley.

TABLE NO. 5.—INDICATED HORSEPOWER DEVELOPED BY GAULEY RIVER.

SECTION OF STREAM									Horsepower available from storage for		
From	To	Length mi.	Mean Drainage Area. sq. mi.	Minimum Discharge. sec. ft.	Assumed Discharge for Maximum Development. sec. ft.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Horsepower.	12 mo's.	6 mo's.	3 mo's.
Source	Below Williams R.	33	a181	38	217	2,000	1,750	10,000	.....	.....	.....
Below Williams R.	Above Cranberry R.	17	209	44	253	280	1,130	6,520	.....	.....	.....
" Cranberry R.	" Meadow R.	31	573	62	462	770	4,390	32,700	3,720	7,440	14,880
" Meadow R.	Mouth	27	1,310	157	936	b480	6,930	41,300	10,400	20,800	41,600
Totals		108				3,530	14,200	90,520	14,120	28,240	56,480

a. Total Area. *b.* Fall reduced to 300 ft. by proposed Gauley reservoir.

TABLE NO. 6.—INDICATED HORSEPOWER DEVELOPED BY TRIBUTARIES OF GAULEY RIVER

STREAM.	SECTION.		Length mi.	Mean Drainage Area. sq. mi.	Minimum Discharge. sec. ft.	Assumed Discharge for Maximum Maximum Development. sec. ft.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Development Horsepower.
	FROM	TO							
Cranberry R.	Source	Mouth	30	102a	5	55	2,100	241	2,650
Cherry R.	do.	do.	25	168a	8	90	2,000	368	4,140
Muddlety Cr.	do.	do.	22	66a	3	36	1,000	69	828
Hominy Cr.	do.	do.	18	98a	5	53	1,500	172	1,830
Meadow R.	do.	below Big Clear Cr	19	165a	8	89	1,400	258	2,860
do.	below Big Clear Cr	2,200 ft. Contour	18	222	10	119	300	276	3,280
do.	2,200 ft. Contour	1,800 ft. Contour	11	295	14	159	400	516	5,840
do.	1,800 ft. Contour	Mouth	8	350	22	189	670	1,360	11,700
Twenty-mile Cr.	Source	Mouth	30	75a	4	40	1,400	129	1,290
TOTALS								3,389	34,418

a. Total area.

Elk River.

The drainage basin of the Elk river is located in about the central part of the state. The river rises in the western part of Pocahontas county; from there it flows in a northwesterly direction across the southern corner of Randolph county, across Webster county to near Sutton in Braxton county, from there it flows in a southwesterly direction out of Braxton county, and across Clay and Kanawha counties, joining the Kanawha at Charleston. Its drainage area is about 1,550 square miles.

The elevation of the sources of the river is about 4,000 feet; the average slope from Back creek to the mouth is about 7 feet to the mile.

The basin is long and comparatively narrow, being somewhat bow shaped. It is bounded on the east and north by the Little Kanawha, Tygart, and Cheat river basins, and on the south and west by the Gauley and Greenbrier. The principal tributaries are Holley and Birch rivers, Buffalo, Big Sandy, Blue, and Little Sandy creeks.

The Coal and Coke railroad parallels the river from Charleston to Sutton. The Baltimore and Ohio crosses the basin above Sutton, and the West Virginia Midland railroad runs from Holly on the Baltimore and Ohio to Webster Springs.

The Allegheny-Kanawha coal formation occurs throughout the basin, the western divide of the basin being approximately the western boundary of the formation.

Table No. 7 and Table No. 8, respectively, give the power on the Elk river and on the tributaries of the Elk.

TABLE NO. 7.—INDICATED HORSEPOWER DEVELOPED IN ELK RIVER.

SECTION OF RIVER.		Length mi.	Mean Drainage Area. sq. mi.	Minimum Discharge. sec. ft.	Assumed Discharge for Maximum Development. sec. ft.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Development Horsepower.	Horsepower available from storage for		
FROM	To								12 mo's	6 mo's.	3 mo's.
Source	below Back Fork	40	a227	38	177	2,500	2,180	10,200	.....	.....	.....
below Back Fork ..	above Holly River	25	282	47	220	550	2,380	11,100	.....	.....	.....
do. Holly River .	above Birch River	30	552	52	310	180	861	5,130	.....	.....	.....
do. Birch River .	do. Buffalo Cr.	25	832	55	467	b50	253	2,150	.....	.....	.....
do. Buffalo Cr. ..	Mouth	51	1,280	60	729	150	828	10,100	19,000	38,000	76,000
TOTALS...	.....	171				3,430	6,502	38,680	19,000	38,000	76,000

a. Total area. *b.* Fall reduced about 25 ft. by proposed Elk river reservoir.

TABLE NO. 8.—INDICATED HORSEPOWER DEVELOPED BY TRIBUTARIES OF ELK.

STREAM.	SECTION.		Length mi.	Total Drainage Area. sq. mi.	Minimum Discharge. sec. ft.	Assumed Discharge for Maximum Development. sec. ft.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Development. Horsepower.
	FROM	TO							
Holly R.	Source	Mouth	25	153	26	120	2,000	1,200	5,520
Birch R.	do.	do.	32	139	23	108	2,000	1,060	4,960
Buffalo Cr.	do.	do.	21	113	19	88	1,400	611	2,830
Big Sandy Cr.	do.	do.	32	101	17	79	410	160	745
Blue Cr.	do.	do.	23	58	10	45	280	64	1,100
Little Sandy Cr.	do.	do.	22	67	11	52	920	232	290
TOTALS...								3,327	15,445

Coal River

The basin of the Coal river lies in the south-central part of West Virginia, south of the Kanawha river. The river rises in the central part of Randolph county, flows northwesterly across Boone county and enters the Kanawha river near St. Albans in Kanawha county. The drainage area is about 900 square miles.

The elevation of its sources is about 2,000 feet; the slope from Clear Fork to the mouth averages about 6 feet to the mile. The basin is roughly a right triangle in shape with the hypotenuse parallel to the Kanawha river. At the headwaters the topography is rough and mountainous. It is not cut up to such an extent as the tributaries on the north side of the Kanawha whose sources are at a much greater elevation. The headwaters are forested to a considerable extent. The mean annual rainfall at the sources is about 45 inches, decreasing towards the mouth of the river.

The principal tributaries are Clear Fork and Little Coal river.

The Chesapeake and Ohio railroad parallels the river from St. Albans to Peytona, and the Little Coal from the mouth to Seng in Logan county. The Chesapeake and Ohio also enters the basin at the sources of the Coal, following along Clear Fork to Lawson in Raleigh county.

The New River-Pocahontas coal formation occurs at the sources of the river and the Allegheny-Kanawha formation occurs over the rest of the basin as far down as Lurd.

Table No. 9 shows the power on the Coal river and tributaries.

TABLE NO. 9.—INDICATED HORSEPOWER DEVELOPED BY COAL RIVER.

SECTION OF RIVER. From	To	Length mi.	Mean Drainage Area. sq. mi.	Minimum Discharge. sec. ft.	Assumed Discharge for Maximum Development. sec. ft.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Development. Horsepower.
Source.....	below Clear Fk. ..	35	a232	8	77	1,600	294	2,840
below Clear Fk. ..	below Little Coal R	36	339	12	113	270	298	2,800
below Little Coal R	Mouth.....	17	865	31	288	70	200	1,850
LITTLE COAL RIVER								
Source.....	below Spruce Fk. .	35	a272	10	91	2,200	506	4,600
below Spruce Fk. ..	Coal River	25	330	12	110	100	110	1,010
TOTALS.....							1,408	13,100

a. Total Area.

Minor Tributaries of the New-Kanawha River in West Virginia.

Table No. 10 gives the more important minor tributaries of the New and Kanawha rivers and the power on each. The Bluestone is the most important, having a total area of about 460 square miles. The Pocataligo river, Eighteen Mile and Thirteen Mile creeks have much the same characteristics as the minor tributaries of the Ohio, the country being fairly rough at the sources, medium slope from the mouth to near the sources, with a small low water flow and comparatively severe floods.

The other tributaries are situated in country similar to the Greenbrier and Gauley rivers with steep and narrow valleys and large slope in the main streams.

TABLE NO. 10.—INDICATED HORSEPOWER DEVELOPED BY THE MINOR TRIBUTARIES OF THE NEW-KANAWHA RIVER.

STREAM.	SECTION.		Length in Miles.	Total Drainage Area. sq. mi.	Minimum Discharge. sec. ft.	Assumed discharge for maximum development. sec. ft.	Total Fall. feet.	Minimum Horsepower.	Assumed Maximum Development Horsepower.
	FROM	TO							
East River	Source	Mouth	24	79	17	50	1,100	430	1,260
Indian Cr.	do.	do.	34	180	40	113	1,000	920	2,600
Bluestone R.	do.	Below Mill Cr.	23	111	33	56	1,100	836	1,420
do	Below Mill Cr.	Above Brush Cr.	50	a196	38	88	560	2,010	4,530
do	Below Brush Cr.	Mouth	11	a405	35	146	450	1,450	6,040
Brush Cr.	Source	Mouth	22	69	5.9	25	1,000	136	575
Piney Cr.	do.	do.	30	132	29	83	1,700	1,130	3,240
Paint Cr.	do.	do.	42	121	6	66	1,400	193	2,120
Pocotaligo R.	do.	do.	55	296	10	97	500	116	1,120
18 Mile Cr.	do.	do.	27	60	2	20	380	18	175
13 Mile Cr.	do.	do.	28	80	3	26	280	19	167
TOTAL:								7,258	23,247

a. Mean Area

TABLE NO. 11.—SELECTED RESERVOIR SITES—KANAWHA RIVER BASIN.

STREAM AND LOCATION.	Catchment Area. sq. mi.	Flow Available. sec. ft.	Capacity of Reservoir. million cu. ft.	Equivalent Mean Annual Flow. sec. ft.	Height of Dam. feet	Area of Flow Line. acres.
New River—above mouth of Greenbrier River.	3,600	5,750	20,300	644	135	8,000
Greenbrier River—Pocahontas County.	320	460	16,300	460	177	4,700
Greenbrier River—Lewisburg	680	980	32,900	980	164	11,600
Gauley River—Fayette County	1,290	1,860	35,900	1,140	250	7,500
Meadow River—Greenbrier Co.	180	250	8,000	250	80	7,000
Muddlety Creek—Nicholas Co.	60	90	3,400	90	74	2,600
Elk River—Clay County	940	1,350	49,900	1,350	190	15,700

Tygart-Monongahela River.

Tygart river, also called Tygart Valley river, rises in Randolph county. Its drainage basin has an area of about 1,420 square miles and includes portions of the following nine counties: Pocahontas, Randolph, Upshur, Barbour, Tucker, Preston, Taylor, Marion, and Monongalia. The source is in the extreme southern part of Randolph county; from there it flows a little west of north to its junction with the West Fork river about one mile above Fairmont. Below the junction the stream is called the Monongahela river. The elevation at the sources is about 4,000 feet; the elevation at the mouth about 860 feet. The average fall per mile is about 25 feet; the average fall below Belington is about 14 feet per mile.

The principal tributaries are Middle Fork river with a drainage area of 152 square miles, Buckhannon river with 304 square miles, and West Fork river with 876 square miles; the first two join the river 52 and 48 miles, respectively, from the mouth, and the West Fork at the mouth.

From the source to a point about five miles above Huttonsville the valley is narrow and thinly settled. Following down the valley to three miles below Elkins there is almost continuous bottom land, much of it being nearly a mile wide. Between Belington and the mouth of the Buckhannon the valley is narrow and gorge-like. Below the mouth of this stream to Grafton, the valley, although still sided by steep hills, opens out into bottom land of limited extent, principally at and near Philippi, and at Grafton. Between Grafton and the mouth the hills again close in near the stream.

About 43 per cent of the basin is under forest cover, 8 per cent of which is composed of virgin forest, occurring in practically two areas, one situated at the headwaters of the Middle Fork Branch and the other at the headwaters of the main stream. About 7 per cent of the wooded area has been burned over. By far the greater area of the woodland covers the high country of the basin, which begins with and lies to the south and southeast of the Laurel-Rich mountain range and to the west of this range across the upper waters of the Buckhannon and Middle Fork.

The upper portion of this basin receives the heaviest rainfall recorded on either the Allegheny or Monongahela basins, the maximum annual rainfall at Pickens reaching 80.9 inches in 1907.

According to the West Virginia geological map, the eastern edge of the Allegheny coal formation crosses the river about six miles west of Elkins, the limit of the field being along the western slope of Laurel ridge and close to the crest of that range. From this point to within about nine miles of the Monongahela river, the valley holds beds of this formation and along this stretch of the stream coal is mined at a number of places on the banks. For two or more miles above the mouth the stream flows between coal areas, which are said to be considerably above the river.

The Baltimore and Ohio railroad closely follows the stream from the mouth to Belington from which place the Western Maryland operates a

line as far as Huttonsville. The principal towns and their populations are as follows: Huttonsville, 250; Beverly, 440; Elkins, 5,260; Belington, 1,480; Philippi, 1,040; Grafton, 7,560.

The Monongahela proper has its head about 1.4 miles above Fairmont, from which point it flows in a northeasterly direction for about 35 miles and enters Pennsylvania from Monongalia county. The average fall of the portion of the river in West Virginia is over 2 feet to the mile.

The valley from Fairmont to the state line is compartively narrow and the tributaries are small and relatively unimportant. The hills are close to the river and there is but little bottom land.

The Baltimore and Ohio railroad parallels the river below Fairmont.

The Monongahela has been made navigable by means of locks and dams from Fairmont to Pittsburg. Dam No. 15 is located a short distance below Fairmont; Dam No. 9 is located about one mile above the state line.

Cheat river is the most important tributary in West Virginia. It joins the Monongahela at Point Marion, Pennsylvania, about two miles below the state line. Practically all the drainage area of the Cheat river lies in West Virginia.

The topographic conditions and the rapid fall of the Tygart and its tributaries are favorable for the development of water power. Conditions for the development of power along the Monongahela are not so favorable. Power could probably be developed at the dams built for navigation purposes, especially if storage were developed in the basin to any extent.

Table No. 12 gives the amount of power along the main stream, and Table No. 15 the amount of power on the minor tributaries. Dunkard creek is considered as being in West Virginia although about one-half its drainage basin lies in Pennsylvania.

TABLE NO. 12.—INDICATED HORSEPOWER DEVELOPED BY THE TYGART-MONONGAHELA RIVER.

SECTION OF RIVER.		Length mi.	Mean Drainage Area. sq. mi.	Minimum Discharge. sec. ft.	Assumed Discharge for Maximum Development. sec. ft.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Development, Horsepower.	Horsepower available from storage for		
From	To								12 mo's	6 mo's.	3 mo's.
TYGART RIVER.											
Source	below Pound Mill Run	19	a88	7	46	1,800	290	1,900	.....	.....	.....
below Pound Mill Run	2 mi. above Roaring Cr.	31	205	16	106	280	412	2,700	.....	.....	.....
2 mi. above Roaring C.	above Middle Fk.	16½	379	30	197	250	690	4,530	12,900	25,800	51,600
below Middle Fork	above Buckhannon R.	8½	596	48	310	155	684	4,420	11,200	22,400	44,800
below Buckhannon R.	below Frog Run	28	1,080	86	520	320	2,530	15,300	40,200	80,400	160,800
below Frog Run	above West Fork R.	28	1,320	106	630	135	1,310	7,820	18,800	37,600	75,200
MONONGAHELA RIVER.											
below West Fk. Riv.	lower pool Dam No. 9	31	2,500	150	940	73	1,000	6,300	15,600	31,200	62,400
TOTALS		152				3,013	6,916	42,070	98,700	197,400	394,800

a. Total area.

TABLE NO. 15.—INDICATED HORSEPOWER DEVELOPED BY THE MINOR TRIBUTARIES OF TYGART-MONONGAHELA RIVER.

STREAM.	SECTION.		Length mi.	Mean Drainage Area. sq. mi.	Minimum Discharge. sec. ft.	Assumed Discharge for Maximum Development. sec. ft.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Development. Horsepower.
	FROM	TO							
Middle Fk.	Source	below Cassidy Fk.	15	a65	5	34	1,200	138	940
do	below Cassidy Fk.	Mouth	25	113	9	59	540	447	2,930
Buckhannon R.	Source	Alexandria	17	a90	7	47	1,300	209	1,410
do.	Alexandria	¼ Mi. above Sand Run	33	200	16	104	470	692	4,490
do.	¼ mi. above Sand Run	Mouth	11	330	26	171	60	144	944
Sandy Cr.	Source	Mouth	20	a84	7	44	1,000	161	1,010
Three Fk. Cr.	do.	do.	25	a98	8	51	1,000	184	1,170
West Fk. R.	do.	below Washburn Run	22	a105	4	19	500	46	218
do.	below Washburn Run	Tygart River	70	475	17	88	160	250	1,300
Buffalo Cr.	Source	Monongahela R.	55	a130	4	24	400	87	221
Deckers Cr.	do.	do.	25	a57	2	10	790	36	182
Dunkard Cr.	do.	do.	35	a200	7	37	400	64	340
TOTALS								2,408	15,155

a. Total Area.

Cheat River.

The Cheat river, or its continuation, the Shavers Fork, rises in the northern part of Pocahontas county, West Virginia, and flows in a general northerly direction, joining the Monongahela at Point Marion, Pennsylvania, one mile north of the state line. The elevation of its source is about 4,500 feet, from which it falls to 780 feet at the mouth.

The average fall is about 25 feet per mile; from Shavers Fork to the mouth the fall averages about 11 feet to the mile.

The Cheat is formed by Shavers Fork and Dry Fork, which join at the town of Parsons. There is a strong contrast between the general shape of the drainage basins of these two tributaries, the former being long and narrow and the latter fan-shaped. The only important tributary of the Cheat proper is Big Sandy creek which enters on the right bank.

The drainage basin, which has an area of 1,380 square miles, drains portions of the following counties: Pocahontas, Randolph, Tucker, Barbour, Preston, Monongalia, in West Virginia; Fayette in Pennsylvania, and a very small part of Garrett in Maryland.

The topography over much of the basin is mountainous. Practically all of the upland is rough and many of the valleys have been formed into deep gorges with swiftly flowing streams. Beginning at the head of Shavers Fork, it may be said that over half the length of the channel of the Cheat lies in a narrow, steep-sided and uncultivated gorge, with the mountain slopes wooded on these reaches and along most of the remainder of the stream. Above Parsons, for a distance of a few miles, the valley opens out, here and there, with the stream flowing through low bottom land or flood plains. Below the town for a distance of nine miles, to the village of St. George, the stream is crooked and the valley steep-sided and broad, widening in places to about half a mile across cultivated and unusually level bottoms. At and above Rowlesburg narrow patches of cultivated bottom land obtain, and a similar condition exists below Mont Chateau, where the degree of cultivation is somewhat better. About half way up from Parsons, the Shavers Fork valley has been cut down by the stream to a depth of nearly 2,000 feet, the mountain top on the east being less than four-tenths of a mile distant. Below Albright the precipitous sides have a fall of 1,200 feet in less distance. The Cheat possesses much natural beauty and the views obtained at such points as Coopers Rock, Cheat View, and a number of places along the upper waters are notably fine.

About 69 per cent of the drainage area is under forest cover, which is fairly well scattered, but is most abundant on the higher elevations of the upper portion, the basins of the Dry Fork and Shavers Fork being respectively 77 per cent and 83 per cent wooded. This includes a number of tracts of virgin timber, aggregating an area of 221 square miles, as well as about 125 square miles of burned over forest land. All but about 75 square miles of this virgin timber is located above Parsons, 43 square miles being on Shavers Fork, mainly in one large tract, and 103 square miles on the Dry Fork, in several tracts of considerable size.

The rainfall in this drainage basin is the greatest of any of the tributaries of the Monongahela in West Virginia, the maximum recorded at Pickens and Terra Alta being 81 and 76 inches, respectively, which occurred in 1907.

The geological formation along the valley contains coal, limestone and building stone. The Pittsburg coal bed is mined high in the hill, near the Monongahela river, and several beds, geologically lower, cross the valley in two narrow belts, one at Mont Chateau and the other at Albright, the field width at the latter place being the greater and covering about five miles of the stream. In the intervening part of the valley, according to available data, there is no coal, evidently due to the Chestnut ridge anticlinal having raised the measures high above the stream, resulting in the erosion of the strata. On the West Virginia map a field of considerable length is indicated on the Shavers Fork, but no description concerning it was noticed in the report of the Geological Survey of the state.

The railroads entering the valley of the Cheat and passing along close to the stream are as follows: Baltimore and Ohio railroad, from the mouth to Cheat Haven, 3 miles; Morgantown and Kingwood, Albright to Rowlesburg, 14 miles. The main line of the latter, east and west crosses the valley at Rowlesburg. The towns of importance and their respective populations are as follows: Point Marion, 1,390; Albright, 80; Rowlesburg, 940; Parsons, 1,780.

The topography of the drainage basin of the Cheat and the high average fall are very favorable for water power development. Table No. 13 gives the amount of water power on the stream from the source to the mouth.

Table No. 14 gives the amount on the main tributaries.

TABLE NO. 13.—INDICATED HORSEPOWER DEVELOPED BY CHEAT RIVER.

SECTION OF RIVER.									Horsepower available from storage for		
From	To	Length mi.	Mean Drainage Area. sq. mi.	Minimum Discharge. sec. ft.	Assumed Discharge for Maximum Development. sec. ft.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Development. Horsepower.	12 mo's	6 mo's.	3 mo's.
Source	3,000 ft. Contour	30	a88	24	59	1,500	826	2,030	.....	.....	.....
3,000 ft. Contour	above Dry Fork	45	151	41	101	1,370	5,160	12,700	.....	.....	.....
below Dry Fork	Albright	45	865	151	454	b440	6,120	22,100	21,100	42,200	84,400
Albright	Mouth	29	1,220	214	770	400	7,880	28,300	27,200	54,400	108,800
Totals		149				3,710	19,986	65,130	48,300	96,600	193,200

a. Total area. *b.* Fall reduced to 280 ft. by proposed Cheat River reseservoir.

TABLE NO. 14.—INDICATED HORSEPOWER DEVELOPED BY TRIBUTARIES OF CHEAT RIVER.

STREAM.	SECTION.		Length mi.	Minimum Discharge. sq. mi.	Mean Drainage Area. sec. ft.	Assumed Discharge for Maximum Development. sec. ft.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Development, Horsepower
	FROM	TO							
Dry Fork	Source.....	above Laurel Fk.	28	a145	39	97	2,300	2,060	5,130
do	below Laurel Fk. ..	Cheat R.	13	345	94	232	400	3,410	8,550
Laurel & Gladys Fks	Source.....	Dry Fork	24	a123	33	83	1,800	1,370	3,440
Blackwater R.	Source.....	Dry Fork	30	a139	38	93	1,600	1,400	3,420
Big Sandy Cr.....	Source.....	Cheat R.	28	a100	27	67	1,000	621	1,540
TOTALS...	.....	.....						8,861	22,080

a. Total Area.

TABLE NO. 16.—SELECTED RESERVOIR SITES—MONONGAHELA RIVER BASIN.

STREAM & LOCATION.	Catchment Area. sq. mi.	Flow Available. sec. ft.	Capacity of Reservoir. million cu. ft.	Equivalent. Mean Annual Flow. sec. ft.	Height of Dam. feet.	Area of Flow Line. acres.
TYGART RIVER—Beverly	330	560	19,100	560	142	19,000
MIDDLE FORK TYGART RIVER—Barbour County	140	230	8,100	230	107	4,300
BUCKHANNON RIVER—Buckhannon	310	530	18,800	530	77	13,300
TETER CREEK—Nestorville	40	60	2,600	60	115	1,300
WEST FORK RIVER—Clarksburg	380	640	24,700	640	109	15,900
BOOTHS CREEK—Monongah	40	70	2,800	70	191	1,600
ELK CREEK—Clarksburg	100	170	5,900	170	92	4,500
BUFFALO CREEK—Mannington	40	70	2,400	70	59	2,100
CHEAT RIVER—Tucker County	820	1,400	23,800	775	200	6,600

Other Streams in the Ohio River Drainage Basin

Little Kanawha River.

The Little Kanawha river rises in the southern part of Upshur county, flows west by northwest across Lewis, Braxton, Gilmer, and Calhoun counties to Elizabeth in Wirt county, at which point it turns nearly north and flows across Wood county into the Ohio river at Parkersburg, West Virginia. The area of the drainage basin is about 2,160 square miles. . The elevation of the sources is about 2,500 feet. The average fall from the Right Fork to the mouth is about 3 feet per mile, which is a low average fall from the view of water power possibilities.

The headwaters are forested to some extent. The annual rainfall at the sources is about 50 inches, decreasing to about 45 inches at the mouth.

The drainage basin is roughly circular in shape with a protuberance to the east which contains the sources of the river. The valleys of the tributaries have steep sides and slopes and in consequence the rainfall reaches the streams quickly. The main stream is subject to rapidly rising floods to a marked degree. The runoff during the periods of low rainfall is very small.

The principal tributaries are Leading creek, Cedar creek, West Fork river, Hughes river and North Fork. The lower part of the river from the mouth to Creston, a distance of 48 miles, has been made navigable by means of locks and dams. Plans are under contemplation for extending navigation to Burnsville, some 74 miles above the present navigation.

The subject of providing for the development of water power at the dams that would be constructed for navigation purposes should navigation be extended to Burnsville was investigated. It was concluded, on account of the low flow during the dry season, the abundance of cheap gas and coal for fuel, and lack of demand for power, that there was no necessity for providing for water power developments at the proposed dams. Storage however, might change the conditions in regard to low water flow to such an extent that it would be found advisable to provide for water power development.

The Little Kanawha railroad extends up the river to Palestine Transfer, about 32 miles.

The Pittsburg coal formation occurs in the upper part of the basin, extending as far down as Glenville.

Table No. 17 gives the indicated horsepower on the Little Kanawha river. and Table No. 18 that on the tributaries.

TABLE NO. 17.—INDICATED HORSEPOWER DEVELOPED BY LITTLE KANAWHA RIVER.

SECTION OF RIVER.								
FROM	TO	Length mi.	Mean Drainage Area. sq. mi.	Minimum Discharge. sec. ft.	Assumed Discharge for Maximum Development. sec. ft.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Development Horsepower.
Source	below Right Fork	21	a98	16	76	1,500	552	2,620
below Right Fork	Bulltown	11	115	19	90	200	349	1,660
Bulltown	above Tanner Cr.	31	381	27	214	78	194	1,540
below Tanner Cr.	Upper level Dam No. 4	60	940	47	528	70	303	3,400
Upper level Dam No. 4	Mouth	32	1,700	85	970	40	313	3,570
TOTALS		155				1,888	1,711	12,790

a. Total Area.

TABLE NO. 18.—INDICATED HORSEPOWER DEVELOPED BY TRIBUTARIES OF LITTLE KANAWHA RIVER.

STREAM	SECTION		Length mi.	Mean Drainage Area. sq. mi.	Minimum Discharge. sec. ft.	Assumed Discharge for Maximum Development. sec. ft.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Development. Horsepower.
	FROM	TO							
Lick Creek	Source	Mouth	14	a53	8.8	41	400	81	377
Sand and Indian Fks.	do.	do.	16	a68	11	53	500	127	610
Leading Cr.	do.	do.	25	a128	21	99	500	242	1,140
Cedar Cr.	do.	do.	32	a84	14	65	600	193	897
Left, Crooked Right, & West Fks.	do.	do.	30	a207	35	161	500	402	1,850
West Fk. River	do.	do.	38	a242	40	189	600	552	2,610
Spring and Reedy Creeks	do.	do.	31	a262	42	204	500	483	2,340
Hughes River	do.	Smithville	28	a162	27	126	350	218	1,020
do.	Smithville	Mouth	33	341	38	191	65	227	1,140
North Fk.	Source	do.	50	a195	32	152	450	332	1,570
Goose Cr.	Source	do.	23	a53	8.8	41	400	81	379
TOTALS								2,938	13,933

a. Total Area.

Big Sandy River.

The drainage area of the Big Sandy river lies in West Virginia, Kentucky and Virginia. Its total area is about 4,140 square miles, of which about 940 square miles, or 23 per cent, are located in West Virginia. The Big Sandy is formed by the union of the Tug and Levisa Forks at Louisa, Kentucky. from which point it flows in a northerly direction to the Ohio at Catlettsburg, Kentucky. Throughout its length the Big Sandy forms the boundary line between Kentucky and West Virginia.

Both the Tug and Levisa Forks have their sources on the western slopes of the Appalachian mountains in the extreme western end of Virginia. Tug Fork, from its sources flows in a northwesterly direction to its mouth at Louisa. For a short distance below the boundary line of McDowell county it forms the boundary line between Virginia and West Virginia; for the remainder of its length it forms the boundary between Kentucky and West Virginia. Levisa Fork, from its sources flows in a northwesterly direction to Paintsville, Kentucky, where it turns northeasterly and joins the Tug Fork at Louisa.

Both Forks drain a rough and mountainous area at their sources. The valleys are narrow with steep sides and slopes, and the fall of the main stream is rapid; as the sources are left the slope decreases until in the lower part the slope is small. The elevation of the sources of the Forks is about 3,000 feet. The slop of Tug Fork from Dry Branch to Louisa is about 5 feet per mile; from Louisa to the Ohio the fall is but one foot to the mile.

The portion of the drainage basin of the Big Sandy which lies in West Virginia is a narrow strip along the southwestern edge of the state about 115 miles in length with an average width of about 8 miles; at a few places the divide is only 3 or 4 miles from the river.

There are but two tributaries of any size in West Virginia. Dry Fork and Pidgeon creek.

The headwaters are forested to some extent. The mean annual rainfall at the sources is about 45 inches decreasing slightly towards the mouth.

The New River-Pocahontas coal formation occurs from the sources to the mouth of Panther creek. At this point the Allegheny-Kanawha formation begins and continues on down to about 5 miles below Louisa. Coal mines are numerous in McDowell county and along the Tug Fork as far as Naugatuck.

The Norfolk and Western railroad parallels the Tug Fork and Big Sandy from the sources to the Ohio river.

The Big Sandy from Louisa to the mouth has been made navigable by means of three locks and dams.

As a water power stream the great disadvantage of the Big Sandy and tributaries is the low flow during dry seasons and severe floods. These floods rise very quickly and to a considerable height; the range in stage at Williamson on the Tug Fork, and at Pikeville on the Levisa being between 30 and 40 feet. Storage reservoirs of sufficient capacity would reduce the flood stages and increase the low water flow con-

siderably. The abundance of cheap fuel also retards the development of water power. Electrical power, however, derived from water power development on the New river in Virginia has been successfully introduced into the coal mines at the headwaters of the Tug Fork.

Table No. 19 gives the horsepower developed by the Big Sandy and tributaries in West Virginia.

TABLE NO. 19.—INDICATED HORSEPOWER DEVELOPED B Y TUG FORK-BIG SANDY RIVER AND TRIBUTARIES IN WEST VIRIGNIA.

SECTION OF RIVER. From	To	Length mi.	Mean Drainage Area. sq. mi.	Minimum Discharge. sec. ft.	Assumed Discharge for Maximum Development. sec. ft.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Development. Horsepower.
TUG FORK.								
Source	above Dry Fork	32	a270	23	97	2,100	1,112	4,680
below Dry Fork	above Knox Cr.	18	525	45	190	200	828	3,500
below Knox Cr.	Warfield	36	970	58	323	200	1,070	5,940
BIG SANDY.								
at Louisa		..	a3,780	132	1,260	17	206	1,970
at Cavanaugh		..	a4,080	143	1,360	12½	164	1,560
at Catlettsburg		..	a4,140	145	1,380	12	160	1,520
DRY FORK.								
Source	Mouth	27	a180	16	65	2,100	772	3,140
PIDGEON CREEK.								
Source	Mouth	30	a147	13	53	1,400	418	1.710
TOTALS							4,730	24,021

a. Total Area.

Minor Tributaries of the Ohio in West Virginia.

Among the larger of the minor tributaries of the Ohio in West Virginia are Fishing creek, Middle Island creek, Guyandotte river, and Twelve-Pole creek. The largest of these is Guyandotte river which drains an area of about 1,060 square miles parallel to the Tug Fork and Big Sandy. The runoff conditions on the Guyandotte and the topographical features of the basin are practically the same as the Big Sandy. Information in regard to all of the streams enumerated in Table No. 20 is very meagre as there are no runoff data available for any of them and there are no descriptions of any of their drainage basins. It is thought, however, that they are all characterized by low flow in dry seasons with short and violent floods after severe rainstorms. Table No. 20 gives the power developed by these streams; the arrangement in the table is from the state line in order downstream.

TABLE NO. 20.—INDICATED HORSEPOWER DEVELOPED BY MINOR TRIBUTARIES OF OHIO RIVER IN WEST VIRGINIA.

STREAM.	SECTION		Length mi.	Mean Drainage Area. sq. mi.	Minimum Discharge. sec. ft.	Assumed Discharge for Maximum Development. sec. ft.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Development. Horsepower.
	FROM	To							
Cross Cr.	Penn. State line	Ohio R.	7	90	3	30	146	40	403
Buffalo Cr.	do.	do.	17	114	4	38	186	68	650
Wheeling Cr.	do.	do.	27	222	8	74	222	163	1,510
Fish Cr.	Sources	do.	32	a240	8	80	1,200	221	2,210
Fishing Cr.	do.	below No. Fk.	20	a142	5	47	500	58	540
do.	below No. Fk.	Ohio R.	21	184	6	61	70	39	393
Middle Isl. Cr.	Source	West Union Cr.	23	a119	4	40	400	36	368
do.	West Union Cr.	above McElroy Cr.	28	170	6	57	80	44	420
do.	below Mc Elroy Cr.	Ohio R.	41	460	16	153	70	103	986
Sandy Cr. / Mill Cr.	Source	Ohio R.	30	a375	13	125	400	120	1,150
Guyandotte R.	Source	above Clear Fk.	41	a371	32	134	960	705	2,960
do.	below Clear Fk.	Logan	33	658	23	219	400	846	8,060
do.	Logan	Hart	18	940	33	313	45	137	1,300
Clear Fk.	Source	Guyandotte R.	14	a126	11	45	1,450	366	1,500
Mud River	Source	Exray	26	a233	8.2	78	400	76	718
do.	Exray	Guyandotte R.	18	288	10	96	80	74	706
Twelve Pole Cr.	Source	Dunlow	21	a84	2.9	28	800	53	515
do.	Dunlow	above East Fk.	15	108	3.8	36	80	28	265
do.	below East Fk.	above Beach Fk.	11	318	11	106	30	30	292
do.	below Beach Fk.	Ohio River	11	452	16	151	30	44	416
E. Fk. Twelve Pole Cr.	Source	Twelve Pole Cr.	31	a166	5.8	55	880	118	1,110
Beech Fk.	Source	Twelve Pole Cr.	19	a90	3.2	30	410	30	283
TOTALS								3,309	53,475

a. Total area.

Atlantic Drainage

Potomac River.

The North Branch of Potomac river rises in the Allegheny mountains near the southwest corner of Maryland, from there it flows in a northeasterly direction to Cumberland, Maryland; about 15 miles below Cumberland it is joined by the South Branch of Potomac river, forming the head of Potomac river. From Cumberland the river flows in an easterly direction to Williamsport, Maryland, from which point it flows in a southeasterly direction into Chesapeake Bay. Throughout its entire length the North Branch of Potomac river and the Potomac river as far as the mouth of the Shenandoah river at Harpers Ferry form the boundary line between West Virginia and Maryland. The mouth of the Shenandoah is at the easternmost point of West Virginia.

The drainage area of the Potomac river is about 14,500 square miles, of which 3,480 square miles, or 24 per cent, are in West Virginia.

The most important tributaries of the North Branch and the main stream in West Virginia are Patterson creek, Little Cacapon river, Cacapon river, Back creek, Opequon creek and Shenandoah river; only the lower 19 miles of the Shenandoah are in West Virginia. The more important tributaries of the South Branch of Potomac river are North Fork South Branch Potomac river, Luray creek, and Moorefield river.

The North Branch and the South Branch with their tributaries and the tributaries of the main stream as far down as the Shenandoah drain a series of narrow and generally fertile valleys lying between parallel ranges which make up the system of the Alleghenies in this region. Their slopes are not, as a rule, very great. The slopes of the drainage basins, however, are generally very steep. There are few lowlands to be overflowed and no lakes whatever in the region, consequently these streams and the Potomac river are subject to sudden and very heavy freshets in wet seasons, and in dry seasons their discharge becomes small. From the junction of the North Branch and South Branch the Potomac cuts through the mountains at nearly right angles. Its valley is narrow, its slope in many places great. The bed is generally gravel and bowlders with ledge rock at little depth or appearing at the surface.

The elevation of the sources of the North Branch and South Branch is about 3,500 and 3,000 feet, respectively. The average fall of the North Branch from Stoney Run to the mouth is 23 feet per mile; the average fall of the South Branch from Thorn Run to the mouth is about 12 feet per mile. The average fall of the Potomac river to Harpers Ferry is 2. 5 feet per mile.

About one-third of the entire basin is forested, the heaviest growth being located in the region of roughest topography, generally near the headwaters of the southern tributaries. The average rainfall at the sources is about 40 inches.

The following railroads are in the basin: The Baltimore and Ohio railroad parallels the river from Piedmont to Berkeley county; the

Western Maryland from Williamsport to the sources of the North Branch. The Norfolk and Western railroad crosses at Shepherdstown, the Cumberland Valley railroad near Williamsport, the Baltimore and Ohio goes up the South Branch to Romney, paralleling the river part of the way. The Chesapeake and Ohio Canal follows the river from Cumberland to Georgetown, D. C.

The Allegheny-Kanawha coal formation occurs in the basin of the North branch from the sources to Piedmont.

As a water power stream the principal disadvantage of the Potomac is the great variability of its flow; this, however, could be remedied by means of reservoirs. Good rock foundations for dams can generally be found at small depth; the banks are, as a rule, favorable, and there are several sites where large falls could be rendered available. Table No. 21 gives the indicated horsepower on the North Branch of Potomac river and Potomac river and No. 24 that on the minor tributaries. Tables Nos. 22 and 23, respectively, give the horsepower on the South Branch and on the tributaries of the South Branch. Only those tributaries located wholly or in part in West Virginia have been considered.

TABLE NO. 21.—INDICATED HORSEPOWER DEVELOPED BY NORTH BRANCH POTOMAC RIVER-POTOMAC RIVER.

SECTION OF RIVER.									Horsepower available from storage for		
FROM	To	Length mi.	Mean Drainage Area. sq. mi.	Minimum Discharge. sec. ft.	Assumed Discharge for Maximum Development. sec. ft.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Development. Horsepower.	12 mo's	6 mo's.	3 mo's.
NORTH BRANCH POTOMAC RIVER.											
Source	above Stony Run	12	a93	9.3	55	1,000	214	1,270	.....	.....	.....
below Stony Run	do. Abrams Cr.	6½	168	16.8	99	420	650	3,830	.....	.....	.....
do. Abrams Cr.	do. Savage Run	15	255	25.5	154	710	1,660	10,100	.....	.....	.....
do. Savage Run	Cumberland	29	590	59.0	348	350	1,900	11,200	.....	.....	.....
Cumberland	Mile 180	7	945	94.5	560	63	545	3,250	.....	.....	.....
Mile 180	above So. Branch	10½	1,180	130.	700	25	299	1,610	.....	.....	.....
POTOMAC RIVER.											
below So. Branch	Hansrote	20½	3,025	362	1,450	57	1,900	7,600	2,700	5,400	10,800
Hansrote	above St. Johns Run	19	3,640	437	1,750	65	2,610	10,500	3,080	6,160	12,320
below St. Johns Run	Dam 5	24½	4,520	543	2,170	50	2,500	10,000	2,370	4,740	9,480
Dam 5	Dam 4	20½	5,420	650	2,600	35	2,090	8,370	1,660	3,320	6,640
Dam 4	Harpers Ferry	24	6,130	736	2,940	65	4,400	17,600	3,080	6,160	12,320
TOTALS		188½				2,840	18,768	85,330	12,890	25,780	51,560

a. Total area. *b.* See profile in Water Supply Paper 192 U. S. G. S.

TABLE NO. 22.—INDICATED HORSEPOWER DEVELOPED BY SOUTH BRANCH POTOMAC RIVER.

SECTION OF RIVER.									Horsepower available from storage for		
FROM	TO	Length mi.	Mean Drainage sq. mi.	Minimum Discharge. sec. ft.	Assumed Discharge for Maximum Development.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Development. Horsepower.	12 mo's	6 mo's.	3 mo's.
Source	above Thorn Run	25	a103	13.4	46	1,700	524	1,800	.....	.....	.....
below Thorn Run	above No. Fk. So. Br. Pot. R.	35	236	30.7	107	810	2,280	7,970	.....	.....	.....
below No. Fk. So. Br. Pot. R.	Romney	40½	1,025	131	459	b323	3,890	13,600	10,600	21,200	24,000
Romney	Mouth	29½	1,450	184	653	127	2,210	7,630	6,000	12,000	42,400
TOTALS		130				2,960	8,904	31,000	16,600	33,200	66,400

a. Total area. *b*. Fall reduced to 223 by proposed reservoir.

TABLE NO. 23.—INDICATED HORSEPOWER DEVELOPED BY TRIBUTARIES OF SO. BR. POTOMAC RIVER.

STREAM	SECTION		Length mi.	Total Drainage Area sq. mi.	Minimum Discharge. sec. ft.	Assumed Discharge for Maximum Development. sec. ft.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Development. Horsepower.
	FROM	TO							
Thorn Run	Source	So. Br. Potomac R.	15	50	6.5	22	1,500	224	775
No. Fk. So. Br. P.R.	do.	above Big Run	20	63	8.2	28	1,750	330	1,140
do.	below Big Run	above Seneca Cr.	16	a140	18.2	63	700	1,170	4,060
do.	below Seneca Cr.	So. Br. Potomac R.	18	a280	36.4	126	550	1,840	6,380
Seneca Cr.	Source	No. Fk. So. Br. Pot. R.	20	61	7.9	27	2,500	454	1,570
Luray Cr.	do.	So. Br. Potomac R.							
No. & So. Mill Crs.	do.	do.	20	92	12.0	41	2,000	551	1,900
Moorefield R.	do.	below Little Fk.	25	100	13.0	45	2,000	597	2,060
do.	below Little Fork	So. Br. Potomac R.	17	73	9.5	33	1,200	262	905
Mill Cr.	Source	do.	44½	a186	24.2	84	970	2,160	7,500
			15	52	6.8	23	800	125	430
TOTALS								7,713	26,720

a. Total Area.

TABLLE NO. 24—INDICATED HORSEPOWER DEVELOPED BY MINOR TRIBUTARIES OF NO. BR. POTOMAC RIVER—POTOMAC RIVER.

STREAM	SECTION		Length mi.	Mean Drainage Area. sq. mi.	Minimum Discharge sec. ft.	Assumed Discharge for Maximum Development. sec. ft.	Total Fall ft.	Minimum Horsepower.	Assumed Maximum Development Horsepower.
	FROM	TO							
Stony Run	Source	Potomac R.	27	a59	5.9	35	1,900	258	1,530
Abrams Cr.	do.	do.	19	a37	3.7	22	1,650	141	835
New Cr.	do.	do.	18	a56	5.6	33	1,250	161	948
Patterson Cr.	Source	above Mill Cr.	25	a130	16.9	59	1,700	660	2,310
do.	below Mill Cr.	Potomac R.	21½	217	28.2	98	290	752	2,610
Little Cacapon R.	Source	3 mi. below Frenchburg	12	a44	5.7	20	1,000	131	455
do.	3 mi. below Frenchburg	Potomac R.	16	80	10.4	36	500	478	1,660
Lost River	Source	below Kimsey Run	20	a105	15.8	43	1,100	400	1,090
Lost & Cacapon R.	below Kimsey Run	above North R.	48	255	38.3	105	800	2,820	7,740
Cacapon R.	below North River	Potomac R.	29	640	96	262	200	1,770	4,820
Trout Run	Source	Cacapon R.	17	a45	6.8	18	1,400	219	595
North R.	Source	2 mi. below Rio	18	a81	12.2	33	1,400	393	1,060
do.	2 mi. below Rio	Cacapon R.	27	143	21.5	59	540	1,070	2,930
Sleepy Cr.	Source	Potomac R.	34	a120	18.0	49	630	261	710
Back Cr.	Virginia State Line	do.	28	236	35.4	97	160	521	1,430
Opequon Cr.	do.	do.	29	228	34.2	94	100	315	865
Shenandoah R.	do.	do.	19	2,930	704	1,495	106	6,860	14,600
TOTALS								17,210	46,188

a. Total Area.

Water Power from Storage.

Table No. 11 gives the characteristics of the selected reservoir sites in the Kanawha river drainage basin in West Virginia. A careful study of the topographic maps of West Virginia would undoubtedly show many more favorable locations for reserviors. Field investigations might show that some of them were impracticable, but careful surveys would discover many desirable and practicable reservoir sites. These seven reservoirs as listed in Table No. 11 are simply made use of to show some of the possibilities of securing water power by the use of storage reservoirs. Tables Nos. 2, 3, 5, and 7 show the amount of water power available from storage for different periods on the New-Kanawha river and on the Greenbrier, Gauley, and Elk rivers, respectively. The questions of reservoir capacity and the use of stored water in relation to water power are somewhat complicated and need not be gone into in detail in this report. The tables referred to, as has been stated, give some idea of the possibilities of power from storage.

Table No. 16 gives the chief characteristics of selected reservoir sites in the Tygart-Monongahela drainage basin. What has been said above applys with equal force to the reservoirs in this basin. Tables Nos. 12 and 13 give the horsepower available from storage on the Tygart-Monongahela river and on the Cheat river, respectively.

Considering only the reservoirs in the drainage basin of the Potomac located in West Virginia, there is but one, which is on the North Fork South Branch of Potomac river at Petersburg, West Virginia. The height of the dam is 134 feet, the area of the flow line is 7,600 acres, the mean annual flow available is 520 second-feet. The horsepower available from this amount of water on the Potomac and South Branch of Potomac river is shown in Tables Nos. 21 and 22 respectively.

Colonial Origins of West Virginia Political Institutions

By Dr. Oliver Perry Chitwood, West Virginia University.

On April 10, 1606, King James I. granted to the Virginia Company letters-patent for the establishment of two colonies in America. There was to be a general council in England, which was to exercise a supervising control over both the northern and southern colonies. The local government of the southern colony was entrusted to a council of seven men selected by the general council. In this council were vested all the powers of local government, legislative, executive, and judicial. In 1609 by a change in the charter, the local council was displaced by a governor, who had almost absolute power. The first governor, Lord De La Warr, arrived in Virginia in June, 1610, and superseded Sir Thomas Gates, who had been governing the colony for about a month as the former's deputy. Lord De La Warr's council, consisting of six men chosen by himself, differed from the first one in being only an advisory body.

Another important change was made in the government of the colony when Sir George Yeardley became governor. In obedience to instructions issued by the company the previous year, he called together in the church at Jamestown on July 30, 1619, the first representative legislative assembly that ever convened in English America. This assembly was composed of the governor and his council together with two representatives from each of the eleven plantations. These representatives of the boroughs, or plantations, were elected by the people and were known as Burgesses. The Burgesses, after having been received by the governor and council in the choir, retired to the body of the church and entered upon their work. This was the beginning of the General Assembly, which by 1680 had become a bicameral legislature. It corresponded to its prototype, the English Parliament, and its lineal descendant, our present legislature. The governor and his council were the upper house; and the Burgesses, chosen by the qualified voters, constituted the lower house. After 1661 the laws provided that each county should send two representatives to the House of Burgesses. The towns of Williamsburg, Norfolk and Jamestown and the College of William and Mary also had one representative each. Measures passed by the Assembly could be vetoed by the company up until 1624, and by the king after that time. The Assembly met at the call of the governor, who had power to prorogue or dissolve it. Besides being a law-making body, the Assembly was also for some time a court of justice. In the early years it had original and appellate jurisdiction in both civil and criminal cases, and was the highest court of appeal in the colony. In 1682 the assembly lost its right to hear appeals. but after this we find it exercising the privilege of passing bills of attainder. At no time during the colonial period were the acts of the assembly subject to review by the courts.

By 1682, the Virginia constitution had begun to crystallize into its permanent form. The chief executive officer was the governor, who was appointed by the company until 1624 and by the king after that time. His duties from the beginning were pretty much the same as those that engage the attention of our chief executive to-day. Besides being at the head of the administration, he was commander in chief of the militia, made numerous appointments to office, and exercised the power of pardon and reprieve. He also had power to remit fines and forfeitures and could pardon all crimes except willful murder and treason. These could be pardoned only by the king.

Next to the governor in the administration came the council, a body of varying size but usually numbering about twelve or thirteen. The councillors of the first governor, as we have seen, were chosen by himself. Appointments to the later councils were made on the recommendation of the governor by the company in the earliest years and by the king after the company's charter had been annulled. They were usually men of means and influence, for a high property qualification ruled out all but the well-to-do. They were not chosen for any definite period but were re-commissioned whenever a new governor was appointed or a new king came to the throne. The old councillors, however,

were usually continued in office by the new commissions and so they virtually held their positions by life tenure. They not only received pay for their services but also had a monopoly of most of the places of honor and profit in the colony. Each one was usually the commander of the militia in his own county with a rank of colonel. While the council was theoretically only an advisory body, yet it was frequently able to curb the power of the governor. The councillors were also judges of the superior court, and we have already seen that they constituted the upper house of the assembly. There is nothing in the governmental machinery of West Virginia to-day that corresponds exactly to the old colonial council, but to it our senate, our supreme court of appeals, and the governor's staff all owe their origin.

The colonial judiciary developed into its final form at a pretty early date. When the colony was first settled, the local council tried all causes except certain ones specified in the charter. These were to be sent to England for trial, and appeals to the council and company in England were to be allowed in certain other cases. Ordinary cases were decided by a majority vote, but all capital offenses were tried by a jury of twelve men. When the local council was superseded by the governor and his council, the power of dispensing justice was probably passed on from the former to the latter body. At any rate, we find the governor and council acting as a court of justice from 1619 to the end of the colonial period. During the first years, the meetings of the council for the trial of causes were held at irregular intervals. It was not many years, however, before a system of regular quarterly terms had been evolved, and the council court had received the name of *Quarter Court*. In 1659, the sessions of the Quarter Court were reduced to three a year. The term *Quarter Court* had now become a misnomer, and in a few years that of *General Court* was substituted for it. In 1684, the sessions were made semi-annual, and from that time until the Revolution the court met regularly in April and October.

The Quarter or General Court took cognizance of both civil and criminal causes, and its jurisdiction was both original and appellate. At first the governor and council decided causes of all kinds; but after the county courts had grown into importance their jurisdiction was restricted to the more important civil and criminal cases. The governor presided over the court and passed sentence on convicted criminals. Trial by jury was employed in important criminal cases; other decisions were made by a majority of the judges present. The court held its sittings at the capital, first at Jamestown and later at Williamsburg. There seems to have been no state-house in Virginia for a long time, and the business of government was for awhile transacted in the house of the governor. Later in 1663, we find that the sessions of the General Court and Assembly were being held in ale-houses. However, a fine state-house was built when Williamsburg became the capital, and the General Court and Assembly were comfortably housed in this magnificent building.

After the sessions of the General Court were reduced to two a year,

criminals were sometimes necessarily kept in prison six months before they could be tried. The need for a more speedy administration of justice led to the formation of a new criminal tribunal, the Court of Oyer and Terminer. The establishment of this court as a permanent tribunal dates from the first quarter of the eighteenth century. The governor named the judges of this court, but in making out the list, he usually, and after 1755 always, confined himself to councillors. The sessions of the Court of Oyer and Terminer were held twice a year, and at such times as to divide equally the intervals between the terms of the General Court. Its jurisdiction was confined to important criminal cases. After appeals to the Assembly were discontinued in 1682, these two courts were the highest tribunals in the colony. The only appeal from their decisions after that time was to the king and the Privy Council.

The one important unit of local government in colonial Virginia was the county, and the most important part of the local governmental machinery was the monthly or county court. In 1634, the colony was divided into eight shires, or counties, in each of which a court was to be held every month. But this was not the beginning of the monthly courts. We find that as early as 1624, two local courts had been established, which were to meet every month and decide petty cases coming up from the precincts adjacent to them. New counties were formed from time to time and each was given a court as soon as it was organized.

The judges were at first known as commissioners of the monthly courts, but afterwards honored with the title of justice of the peace. The office was one of dignity and was usually filled by men of influence and ability. Except for a short time during the Commonwealth period, the justices were always appointed by the governor. They were not chosen for any definite period, and it seems that their commissions could be terminated at the discretion of the governor. But it was the usual practice for the governor in issuing new commissions to name the old members. So the court was practically a self-perpetuating body. The number of justices to a county varied at different times and in different counties, but usually ranged from eight to eighteen. Four was the necessary quorum for the transaction of business.

The local tribunals were at first known as monthly courts because they convened once a month. But by a statute of 1643, they were to sit only once in two months, and were henceforth known as county courts. By the end of the 17th century, it had again become the custom to meet every month, and this practice continued until the end of the colonial period. The justices, after 1643, could try certain minor civil and criminal cases individually as do our justices to-day. When they met together as a court they had a wider jurisdiction in both civil and criminal causes. All decisions were governed by the opinion of the majority of the justices presnt. In some cases, questions of fact were decided by a petit jury.

There was no lack of variety in the penalties that the early justices enforced against offenders. Whipping was a very common mode of punishment. As a rule the number of stripes given did not exceed thirty-nine, but they were generally made on the bare back. In the records

of one county three cases have been found in which culprits received one hundred lashes each on the bare shoulders; and in another county the sheriff was ordered to give a law-breaker one hundred and twenty lashes on the bare shoulders. Other ways of punishing offenders were to require them to sit in the stocks, lie neck and heels together, or make public confession in church. Fornication and adultery were very much frowned upon by the county courts. In the early years, men and women who had committed these sins were sometimes whipped, and sometimes were compelled to acknowledge their fault in church before the whole congregation. A few instances are recorded in which women who had erred from the path of virtue or had slandered their neighbors were compelled to make public confession while standing on stools in the church, with white sheets wrapped around them and white wands in their hands.

The justices had many duties to perform in addition to those of trying cases. They ordered the opening of new roads and saw that surveyors appointed by them kept the highways opened and cleared. The levy of the county was apportioned by them, and the list of tithables was sometimes taken either by themselves or by officers chosen by them for that purpose. The justices licensed taverns and regulated the prices at which drinks could be sold. All grievances and claims against the general government were heard and examined by the county courts. During a considerable part of the seventeenth century, they also had the power to make or assist in making the by-laws of their respective counties. The court "nominated inspectors of tobacco, granted divorces, regulated the relations of whites to the Indians, tried cases of piracy, erected ducking-stools, pillories, whipping posts and stocks, appointed collectors of county levies, and regulated the relations of master to servant."

In every county there was a regiment of militia composed of all the able-bodied men between the ages of sixteen, eighteen or twenty, and sixty (these were the different limits at different times), except certain classes of persons who were exempted from militia duty by law. There were usually from eight to ten companies in a county, the number of men in each ranging from fifty to seventy-five. Every captain called his company together for drilling four times a year or oftener, and once or twice a year all the militiamen of the county came together for a general muster. The whole regiment was commanded by a colonel or inferior officer, who was appointed by the governor and was usually a member of his council.

When the shires were organized in 1634, sheriffs were appointed, apparently for the first time. Before this time the duties of the sheriffalty were performed mainly by the provost marshal, though the commander of the hundred also sometimes executed the orders of the governor. It seems that the sheriffs were appointed at first by the monthly courts, but during the 18th century they were appointed by the governor. The appointment was generally made on the recommendation of the justices, and so they virtually made the selections. The sheriff was one of the justices, though he did not act as such during his year of

office. His fees were paid in the fluctuating currency of that day, tobacco, and when the price of tobacco was low, the place was by no means a lucrative one. In 1710 the remuneration was so small that the assembly deemed it necessary to pass a law making the office compulsory. The duties of the colonial sheriff were not very different from what they are now. He executed the orders and sentences of the courts and assembly, made arrests, and summoned jurors and others to court. He also usually collected the taxes, and sometimes took the lists of tithables, that is, acted as assessor. The sheriff was also the keeper of the county prison. Prison rules were in one respect more humane in colonial times than they are now. The prisoners were not all shut off from the advantages of fresh air and exercises, but most of them were allowed to walk about during the day time within a certain area around the jail. By an act of 1765, the limits within which prisoners were allowed their freedom were to include an area of not less than five nor more than ten acres. Many persons sent to jail for debt used to take houses within the prison limits and thus lived at home while serving out their terms of imprisonment.

The office of constable was established early in the history of the colony. We cannot say exactly when constables were first appointed, but we know that by 1657 the office was an established part of the governmental machinery of the counties. Every county was divided into precincts, in each of which a constables was elected by the county court. Any person elected constable could be forced to serve for one year. The duties performed by the colonial constable were about the same as those that have engaged his successors up to the present time.

Another important office was that of clerk of the county court. County clerks were usually appointed by the secretary of state, and were regarded as his deputies. The appointments were not made for any definite period but were revocable at the pleasure of the secretary. This patronage not only extended the influence of the secretary throughout the colony, but also proved a source of considerable revenue to him, as it was the custom for all the clerks to pay him a fee every year.

Prior to 1662, there was not a notary public in Virginia. Owing to the lack of such an officer to attest oaths, statements sworn to in Virginia were not given the credit in foreign countries to which they were entitled. For this reason the assembly in 1662 appointed one notary public for the colony, and some years later authorized him to choose deputies throughout the colony.

The legal profession was not, as a rule, encouraged by the legislation of the colonial period. In 1643, it was enacted that all lawyers must be licensed in the Quarter Court before being allowed to practice their profession. Their fees were restricted to twenty pounds of tobacco for every cause pleaded in the monthly courts and to fifty pounds for every one in the Quarter Court. Within two years the assembly repented of having allowed lawyers this amount of liberty, and passed a law prohibiting attorneys from practicing in the courts for money. The reason given for this action was that suits had been unnecessarily multiplied by the "unskillfulness and covetousness of attorneys." The prohi-

bition of "mercenary attorneys" was repealed in 1655 and re-enacted in 1658. The courts must have gotten along badly without the assistance of paid attorneys, for in 1680 the assembly again passed a law which recognized the right of lawyers to charge for their services. This law was soon afterwards repealed, but professional attorneys had been again admitted to the courts by 1718. During the eighteenth century we find no statutes forbidding lawyers to receive compensation for their services, but the fees charged by them continued to be restricted by the assembly.

During the first years of the colony's history, there was no attorney general in Virginia to give legal advice to the Quarter Court. But the governor and council could send to England for an opinion if a cause came before them involving a question of law which they felt incapable of deciding. The first attorney general mentioned in the records was Richard Lee, who was appointed in 1643. The attorneys-general were appointed by the governor, and sometimes with the consent of the king. He had to prosecute criminals before the General Court and the oyer and terminer court, and to give his advice to these courts whenever it was needful.

In 1711, it was found necessary to appoint prosecuting attorneys for the counties. Before that time breaches of the penal laws were prosecuted in the counties by those persons who had reported them to the courts, and informers were given one-half of all fines imposed for offenses reported by them. It sometimes happened that an informer would compound with the accused for his half of the fines and would then stop the prosecution. This would cause the case to be thrown out of court, and so the crown would fail to receive its half of the fine. There was need, therefore of a better method of prosecuting offenders in the counties, and Governor Spotswood issued a proclamation appointing prosecuting attorneys for the counties. These new officers came to stay, and from this time on we find them performing their duties in the county courts. They were deputies of the attorney-general and had to prosecute offenders in the county courts as the attorney-general did in the General Court and oyer and terminer court.

There were no cities in Virginia in the seventeenth century. The first town to grow into such importance as to need a local government of its own was Williamsburg, the capital. In 1722, Williamsburg received a charter from the king which constituted it a city and gave it a separate government. The management of the affairs of the city was entrusted to a mayor, recorder, six aldermen and twelve councilmen. The king appointed the first mayor, recorder and aldermen who were to elect twelve councilmen to hold office during good behavior. These officials were to be a self-perpetuating body, as all vacancies were to be filled by cooptation. They were to meet every year to choose one of the aldermen as mayor for the ensuing year. The mayor, recorder, and aldermen were the judges of the Court of Hustings, and were also justices of the peace in Williamsburg. The jurisdiction of this court was enlarged from time to time, and by 1736 it was equal to that of the county courts. In 1722, Norfolk was granted a city charter and a form of government

that was almost an exact copy of that of Williamsburg. There were no other incorporated cities in Virginia before the Revolution. The assembly appointed trustees for the unincorporated towns, whose duties were "to attend to the surveying, letting and selling of the townland."

The right of jury trial was one of the privileges that the first settlers brought with them from England, and this right was put in practice before the settlement was a year old. In Dale's scheme of military government there was no provision for juries; but when the regime of freedom was inaugurated by Governor Yeardley, the people began again to enjoy the right of trial by jury. In both the General Court and the oyer and terminer courts, important criminal offenses were tried by a petit jury after indictments had been made by the grand jury. The petit jury in both courts was usually composed of twelve men. The petit jury came into the county courts as early as 1642. The grand jury did not make its appearance in the county courts until 1645, and apparently was not permanently established there until more than thirty years later. A part of the work that now falls to the grand jury was done in the colonial period, especially the early part of it, by the churchwardens. They were required to present such offenses as adultery, drunkenness, swearing, absence from church, and other offenses of like character. There was a property qualification for jury service in both the higher and lower courts. In the early years, it was the practice for juries to be kept from food until after they had rendered their verdict. A few cases are recorded in which juries of women were called on to decide questions of fact in cases in which women were charged with witchcraft or of concealing bastard children. In the seventeenth century perplexed coroners in a few cases appealed to the ordeal of touch to decide the guilt or innocence of persons accused of murder.

The benefit of the writ of *habeas corpus* was not formally extended to Virginia until 1710, when this privilege was brought over to the colonists by Lieutenant-Governor Spotswood. But this right was enjoyed in Virginia before this formal recognition of it was made by the crown. During the colonial period, the severity of the laws was mitigated by the custom of allowing the benefit of clergy in many cases of capital felony. Up until 1732, the Virginia laws did not recognize the right of a layman to claim the benefit of clergy unless he could read. In that year the assembly extended the benefit of clergy to negroes, Indians, and mulattoes, and ordered that the reading test should thereafter never be required of anyone who should claim the privilege. Clergy was allowed to a criminal only once during his lifetime. When the court granted the benefit of clergy to an offender, it substituted burning in the hand for the death penalty. In the eighteenth century, branding seems to have been regarded as a mere act of form in Virginia, for it could be done with a cold iron.

The Government of West Virginia

By J. M. Callahan.

Constitution of 1863. The first constitution of West Virginia provided for continued statehood in the Union, white male suffrage, a ballot system to replace the aristocratic system of *viva voca* voting, annual sessions of the legislature, representation in both houses based on white population, election of the governor and judiciary by popular vote, change of elections from May to October, a township system of local government, and a system of free schools. Offices could be held only by those entitled to vote. Amendments required the approval of two legislatures before they could be submitted to the people. The governor still had no veto, and the office of lieutenant governor was abolished. Care was taken to prevent the legislature from making the state liable for debts or liabilities of corporations or persons or for contracting any state debt except to meet annual deficits or to reduce previous liabilities. The capital was located at Wheeling until changed by the legislature.

Constitution of 1872. The second constitution, still in force, was adopted in 1872 by a convention, of 66 Democrats and 12 Republicans ("the Twelve Apostles"), called as a direct result of a change of party control and with the special purpose of changing the supreme court of appeals, and exhibits marks of the post-bellum period of partisanship which preceded it. Under it all male citizens above 21 years of age have the right of suffrage subject to a year's residence in the state and sixty days in the county in which they offer to vote. Among its most important changes were increase of gubernatorial term from two to four years, authorization of the executive veto (which by extension to single clauses may prevent "riders"), biennial legislatures, increase in the size of each house and the term of office of members, abolition of the township system and reinstatement of the old Virginia county system of government by justices of the peace (which, however, was amended in 1881), the prohibition of registration laws and of special legislation in a long list of specified cases. The only new power which it gave to the legislature (inoperative for thirteen years) was that of taxing privileges and franchises of corporations and persons. It refused to insert a clause assuming part of the Virginia debt and it expressly declared that the state shall never be made defendant in any court of law or equity.

Although it provided for some wise changes, it contained several restrictions and inhibitions, and some antiquated or imperfect provisions which have retarded or prevented governmental adjustments necessary to meet modern West Virginia conditions. Among these there is the antiquated clause—peculiar to this state—which provides that "the voter shall be left free to vote by either open, sealed or secret ballot". The clause which relates to the forfeiture of land, originating in a purpose to quiet land titles and reduce litigation, are still a prolific source of expensive litigation.

Amendments. The constitution provides for amendment either by popular vote (at the general election) on proposed change submitted by a two-thirds majority of each house for ratification, or by a constitutional

convention which may be called after the proposition submitted by a majority vote of each house has received the majority of the popular vote, and whose acts must also be submitted to the people for ratification. By the first method, amendments were secured in 1881, 1883 and 1902. That of 1881 revised the article on the judiciary, that of 1883 changed the time of the state elections. Among the changes of 1902 was one increasing the number of supreme court judges to five and authorizing the determination of the salaries of judges by the legislature, another requiring the legislature to provide for the registration of all qualified voters, and another making the office of secretary of state elective and requiring fixed salaries in lieu of the old fee system. (The fee system, although its worst evils have been remedied, is not entirely abolished). A joint committee of the legislature in 1897 proposed other amendments which have never secured the approval of the legislature. Every executive since 1900 has suggested the need of a constitutional convention—the chief objection to which is the expense. Among reforms especially urged is the need of an increase in the size of the senate, and some early change in the present method of choosing senators under which it is possible for eight counties to control the majority of the senate.

State Government. The executive department consists of the governor, ($5,000), secretary of state ($4,000), treasurer ($2,500), auditor ($4,500), attorney-general ($4,000) and superintendent of free schools ($3,000) and after 1912, the commissioner of agriculture ($4,000); all elected with the governor, at the time of the presidential election, for the term of four years beginning March 4 following. All, except the attorney-general, must reside at the capital. Together, the governor presiding, they act as the Board of Public Works which assesses the value of railroad property, designates banks in which the state money shall be kept and has charge of internal improvements. The governor is ineligible for reelection for the four years next succeeding the term for which he was elected. In case of his disability in the fourth year of his term, the president of the senate acts as governor, and after him the speaker of the house—and if both fail the legislature on joint ballot elects an acting governor. Although he may veto the separate items of an appropriation bill, any bill may be passed over his veto by a majority of the total membership of each house. He has no pocket veto. He appoints, subject to the consent of the majority of the members of the senate, all officers for whose selection no other method is provided.

Other state officials (appointed by the governor) are the three mem-members of the state board of control ($5,000 each), four members of the public service commission ($6,000 each), librarian ($1,200), state tax commissioner ($4,000), adjutant-general ($3,600), state geologist (who serves without pay), chief of the department of mines ($3,000), chief road engineer ($3,500), commissioner of labor ($1,800), forestry game and fish warden ($1,800).

Among the administrative boards that of first importance is the rotary board of control (created in 1909) consisting of three persons ($5,000 each) appointed by the governor for terms of six years. At its discretion

and upon its approval the appropriations to state institutions (or education, charities and correction), and to various boards and bureaus, are expended. Its creation illustrates the recent tendency toward centralization of administration both for efficiency and for economy. A public service commission was recently created (1913).

Among the other important permanent boards, bureaus or commissions are the geological and economic survey, state board of agriculture (superseded by the new department of agriculture after 1912), the department of mines, the state board of health. the bureau of labor, bureau of roads, the department of history and archives, state board of education and the state board of regents for the University and normal schools. A state school book commission was established in 1911 to perform the service which was done by the legislature itself until 1897 and by county school book boards from 1897 to 1912.

The chief state institutions are the University, six normal schools, the penitentiary (self supporting), a reform school for boys, an industrial home for girls, a school for the deaf and blind, two hospitals for the insane, an asylum for incurables, three miners' hospitals, the humane society (which since 1908 has control of the West Virginia children's home) and a tuberculosis sanitarium.

The legislature (thirty senators and eighty-six members of the house of delegates) meets in January of odd years. Its membership can not include persons holding lucrative office under the state or United States government, nor an officer of any court of record, nor salaried officers of railroad companies. Its sessions of forty-five days may be extended by a vote of two-thirds of the members elected to each house. After its adjournment an appropriation bill cannot be vetoed. No act takes effect until ninety days after its passage unless especially otherwise provided by vote of two-thirds of the members of each house.

The judiciary is composed of a supreme court of appeals (five judges elected for terms of twelve years with a salary of $4,500); twenty-two circuit courts whose judges receive $3,300; several courts of limited (generally criminal) jurisdiction created to meet the needs resulting from rapid industrial development in some parts of the state; the county court of three commissioners whose judicial powers are confined to such business as probate, guardians and administrators; justices of the peace (at least one elected for each magisterial district of the county), and city courts. There are no chancery courts, but courts of record have equity jurisdiction. Notary publics are appointed by the governor without limit as to number. The judicial system cannot be changed more frequently than eight years.

County Government. The county is the unit of local government. The sheriff (who also acts as tax collector and treasurer,) the prosecuting attorney, the surveyor, the assessor, and the county superintendent of schools are elected by the voters for terms of four years. No person is eligible for election as sheriff for two full consecutive terms. Three commissioners (constituting the county court) and the clerk of the county court (who also has custody of all deeds and other papers presented for record) are elected for six years. The county court is not composed of trial justices (since 1881) but is largely an administrative board for

county business affairs, chiefly police and fiscal. It appoints coroners, overseers of the poor and surveyors of the roads. It nominates members of the local board of health (who, however, receive their appointment from the state board of health). The board of jury commissioners (two) are appointed by the judge of the circuit court. Each county is divided (by the old Virginia system adopted by the constitution of 1851) into magisterial districts (varying from three to ten) corresponding to the township which was adopted in 1863 and abolished in 1872. Each district elects magistrates (justices of the peace) and constables, and a board of education (a president and two other members) which has power to establish and alter sub-districts, etc.

Present Political and Constitutional Conditions. Since 1900 the reform of the tax laws and the extension of state regulation or supervision, as applied to problems of public health and safety or economic and industrial interests, the increase of administrative organization, methods of party control, and the proposals for a primary election law have furnished the largest questions in politics. Recent legislation includes a much needed pure food law (1907), an act abolishing the sale of cocaine except on prescription of a licensed physician (1911), an act establishing medical inspection in the public school (1911), the appointment of a commission to provide a uniform system for the government of cities and towns (1911), a workmen's compensation law, and the establishment of a public service commission and a bureau of roads (1913). A proposed constitutional amendment prohibiting traffic in intoxicating liquors was submitted to the people at the election of 1912 and ratified by a majority of 90,000 votes. The West Virginia debt question concerning which Virginia brought a suit before the United States supreme court in 1906 and recently obtained a decision in her favor has had an influence in politics.

State Finances. The first substantial reform in taxation was made by the legislature of 1901 which increased taxes from corporations and created a tax commission which resulted in additional reforms. The office of tax commissioner was created in 1904. In 1909 Governor Glasscock urged a tax on coal, oil and gas production but legislation could not be secured. The tax rate in 1911 for state purposes was 2½ cents on $1.00. The chief sources of income are licenses, corporation license tax, interest on deposit, fines, poll taxes, land tax, and tax on personal property (tangible and intangible). Receipts of the state fund for the year ending September 30, 1910 were $4,011 918.28 and disbursements were $3,858,437.72. For the year ending September 30, 1912, receipts were $5,491,201.96 and disbursements were $5,486,307.14.

Political History of West Virginia

By Hon. George E. Price, Charleston, W. Va.

The state of West Virginia was created primarily as a war measure, but it was rather the natural outcome of political conditions which had

existed for a long while, and the war between the States furnished the occasion for a separation of the Northwestern section of Virginia and the Eastern section. The two sections were separated geographically by the great mountains of the Blue Ridge and the Alleghanies. There was not much commercial intercourse between them, the people of the Western counties having commercial relations mainly with Maryland, Pennsylvania and Ohio, especially after the building of the Baltimore & Ohio Railroad through that section East and West. It is true that several turnpike roads had been built by the aid of the State of Virginia between the East and West, and the James River canal had been projected, but it had stopped at the Eastern foot of the mountains.

Politically there were three main grounds of complaint on the part of the people of the Western counties against the Eastern section. It was complained that the political leaders in the East retained their political control and exercised it by discriminating in favor of the Eastern section against the West and Northwest, mainly in three particulars:

First: In the matter of taxation. Slaves under twelve years of age being exempted, and over twelve years of age being assessed at a fixed valuation of $300.00 rather than at their true value.

Second: The basis of representation in the legislature was fixed on what was called a mixed basis, the slave population being taken into consideration in certain percentage in arriving at a basis.

Third: In the distribution of the public funds in the construction of public buildings and works of internal improvement; the complaint of the Western counties being that the improvements were located almost entirely in the Eastern section.

The people of the Eastern section defended themselves against these charges of discrimination. We are not specially interested at this time in the question as to whether the complaints were just or not, but merely in the fact that they existed. There were comparatively few slaves in the boundaries of the counties that first formed the State of West Virginia, there being only about 18,000 slaves in that territory in the year 1861, as compared with over 472,000 in the other counties of the State.

Governor Letcher of Virginia called a special session of the Virginia legislature on January 7th, 1861. Both Houses passed resolutions for the purpose of placing Virginia in the position of mediator between the Federal Government and the States which had already seceded, and asked for a suspension of all aggressive measures for sixty days. The legislature also passed a bill calling a convention of the people of West Virginia on the 13th day of February, 1861. The election of members to this Convention and upon submitting to the vote of the people the question as to whether the State should withdraw from the Union showed a large majority favorable to the Union at that time. This Convention was a remarkable body of the ablest men of Virginia. The committee on Federal Relations consisted of Robert Y. Conrad, A. H. H. Stuart, Henry A. Wise, Robert E. Scott, W. Ballard Preston, Lewis L. Harvie, Sherrard Clemens, W. H. McFarland, William McComas Robert L. Montague, Samuel Price, Valentine W. Southall, Waitman T. Willey, James C. Bruce, William W. Boyd, James Barbour, Samuel C. Williams, William C. Rives, Samuel M. Moore, George Blow, Jr., and Peter C. Johnson.

A majority of this Convention was strongly in favor of preserving the Union, if possible, consistent with the rights of the States, but, upon the firing on Fort Sumpter and the call of the President for volunteers to coerce the seceded States, the sentiment of most of the delegates underwent a change and an ordinance of secession was adopted, to be submitted to a vote of the people, and a great many of the delegates from the Northwestern counties returned to their homes. Meetings in favor of preserving the Union had been held in a number of the Western counties, but no steps had been taken to bring about an organized movement against secession or in favor of the separation of the Western counties from the East until a large meeting was held at Clarksburg, April 22nd, 1861, of which Hon. John S. Carlile was the leading spirit. This meeting adopted resolutions recommending the people of each and all of the counties composing Northwestern Virginia to send at least five delegates to a Convention to be held at Wheeling on May 13th, to determine upon such action as the people of Northwestern Virginia should take. When this Convention assembled there were delegates from twenty-six counties, namely: Hancock, Brooke, Ohio, Marion, Monongalia, Preston, Wood, Lewis, Ritchie, Harrison, Upshur, Gilmer, Wirt, Jackson, Mason, Wetzel, Pleasants, Barbour, Hampshire, Berkeley, Doddridge, Tyler, Taylor, Roane, Frederick and Marshall. John W. Moss of Wood county was made permanent President.

The committee on Federal Relations was composed of the following members: C. Tarr, of Brooke County; Waitman T. Willey, of Monongalia; John S. Carlile, Harrison; John J. Jackson, Wood; Charles Hooten, Preston; Daniel Lamb, Ohio; George M. Porter, Hancock; Joseph Macker, Mason; D. D. Johnson, Tyler; James Scott, Jackson; G. W Bier, Wetzel; R. C. Holliday, Marshall; A. S. Withers, Lewis; E. T. Trahorn, Wirt; F. H. Pierpont, Marion; S. Dayton, Barbour; G. S. Senseny, Frederick; John S. Burdett, Taylor; A. R. MmQuilkin, Berkeley; S. Cochran, Pleasants; J. E. Stump, Roane; S. Martin, Gilmer; Asbury B. Roarbaugh, Upshur; O. D. Downey, Hampshire; and James A. Foley, Ritchie.

There was a strong division of sentiment in this convention. One party under the lead of John S. Carlile favored the immediate division of the State. Another party under the leadership of Hon. Waitman T. Willey was in favor of delay until a vote had been taken on the ordinance of secession. The Convention took a middle course. It adopted resolutions urging the people to vote against the ordinance of secession, to vote for members of Congress and members of the House of Delegates who were in favor of maintaining the Union, and in the event of the adoption of the ordinance of secession, the counties represented were recommended to appoint on June 4th, 1861, delegates to a Convention to meet on the 11th day of June, 1861, the Convention to be composed of the delegates so appointed, and also the Senators and delegates to be elected at the election held on the fourth Thursday of May. A very large majority of the vote in the Northwestern counties was against the ordinance of secession, but, as is well known, it was adopted by the State at large, and thereupon, in accordance with the recommendation of the Wheeling Convention, elections were held in the Northwestern counties on June 4th for another Convention to be held June 11th. This Convention met

June 11th. 1861, with thirty-five counties represented, including the Senators and members of the House of Delegates. Arthur I. Boreman of Wood County, was elected President.

The Convention adopted a declaration entitled "A Declaration of the people of Virginia represented in Convention at the City of Wheeling, Thursday, June 13, 1861", in which they declared that all the acts of the Richmond Convention and the Executive passed to separate the Commonwealth of Virginia from the United States or to levy and carry on a war against them were without authority and void, "and that the offices of all who adhere to the said Convention and Executive, whether legislative, executive or judicial, are vacated." The Convention then on June 19th, 1861, passed an ordinance re-organizing the State government, and on June 20th elected the following officers: for Governor, Francis H. Pierpont, of Marion; Lieutenant-Governor Daniel Polsley, of Mason; Attorney-General, James S. Wheat, members of Governor's counsel, Peter G. Van Winkle, Daniel Lamb, William Lazier, William A. Harrison and J. T. Paxton. This was merely claimed to be a re-organization of the government of Virginia. The Convention adjourned June 20th to meet the first Tuesday in August.

In order to complete the re-organization, the General Assembly met in pursuance of the ordinance of the Convention July 1st, at Wheeling. This legislature elected John S. Carlile and Waitman T. Willey as United States Senators. The members of Congress who had been chosen and these Senators so elected were admitted to Congress, and the Federal government recognized this restored government as the real government of Virginia.

Up to this time no definite steps had been taken for the division of the State of Virginia, but now on the 20th day of August, after the Convention had re-assembled, it passed an ordinance providing for the formation of a new state out of a portion of the State of Virginia, describing the boundaries of the state as including the counties of Logan, Wyoming, Raleigh, Fayette, Nicholas, Webster, Randolph, Tucker, Preston, Monongalia, Marion, Taylor, Barbour. Upshur, Harrison, Lewis, Braxton, Clay, Kanawha, Boone, Wayne, Cabell, Putnam, Mason, Jackson, Roane, Calhoun, Wirt, Gilmer, Ritchie, Wood, Pleasants, Tyler, Doddridge, Wetzel, Marshall, Ohio. Brooke and Hancock, thirty-nine in all, and provided for a vote to be taken by the people in these counties on the formation of the new state, to be called the State of Kanawha; and delegates to be elected to a Convention for the purpose of forming said state, with a provision for the admission of Greenbrier and Pocahontas, and also Hampshire, Hardy, Monongalia, Jefferson and Berkeley, if the people of those counties voted in favor of it. The Governor was required to ascertain the result of the election, and if a majority were in favor of the formation of a new state, all the delegates were to meet in Wheeling November 26th. This ordinance provided that the new state should take upon itself a just proportion of the public debt of Virginia existing prior to January 1st, 1861, to be ascertained in a certain way therein set out. The vote of the people on this ordinance as reported by the Governor was 18,408 for the new state, and 781 against it.

The Convention met November 26th, 1861, in Wheeling; all the counties

in the present State of West Virginia being represented, except Jefferson, Berkeley, Webster and Monroe. The Convention adopted a constitution for the new State, to be submitted to a vote of the people at an election to be held April 3rd, 1862.

This constitution differed from the old constitution of Virginia in several important particulars. It abolished the old County Court system and provided for Judicial Circuits. and created township government for local affairs. It provided that taxation should be equal and uniform; that the State should contract no debt, but should assume an equitable proportion of the debt of Virginia, and also provided for the establishment of a system of public schools. This constitution was adopted by a vote of the people, the vote being reported as being 18,061 for it and 514 against it. The population of these counties in 1860 was 334,921 whites and 12,771 negroes.

The assent of the State of Virginia to the creation of the State of West Virginia was given by the re-organized government under Governor Pierpont on May 6th, 1862, and it was finally approved by Congress after the constitution had been amended so as to provide for the gradual emancipation of the slaves. This provision was the subject of extended debate and discussion. The constitution as amended was again voted upon by the people and adopted by a majority of 17,000 of the votes cast; and, in accordance with the Acts of Congress, the President of the United States, on April 19th, issued his proclamation providing that the government of the new State of West Virginia should go into effect on the 20th day of June, 1863. Before this date an election was held for State officers and members of the legislature. At this election there were elected for Governor, Arthur I. Boreman; Auditor, Samuel Crane; Treasurer, Campbell Tarr; Secretary of State, J. E. Boyers; Attorney-General, A. B. Caldwell; Judges of the Supreme Court of Appeals, R. L. Berkshire, William A. Harrison and James H. Brown. In accordance with the President's proclamation the new State government went into effect June 20th, 1863, with officers in all the departments of government.

Governor Pierpont, who had been exercising the powers of Governor of the re-organized government of Virginia at Wheeling, now removed the seat of his government to Alexandria, and after the war it was removed to Richmond, and he remained Governor during the early part of the Reconstruction Period.

The first legislature assembled in Charleston June 20th, 1863, the day when the State government went into effect. The Senate was composed of twenty members. John M. Phelps of Mason County was elected President. The House of Delegates had fifty-one members. Spicer Patrick of Kanawha County was elected Speaker. Among the members were Nathan Goff, father of the present United States Senator, Daniel Lamb, of Wheeling; J. C. McGrew, of Monongalia; J. M. McWhorter, Lewis Ruffner, P. G. VanWinkle and Chester D. Hubbard. There was no division by political parties at this time. All were in favor of the maintenance of the Union, and outside of the measures necessary for putting the new State Government into operation, the legislature was chiefly concerned with measures relating to and growing out of the existing war. It remained in session until December 11th, 1863.

This was also true of the legislatures of 1864 and 1865. William E. Stephenson was elected President of the Senate at the session of 1864 over Daniel D. T. Farnsworth. Among the new members of this session was Edwin Maxwell of Harrison Couunty. The Speaker of the House was Le Roy Kramer.

At the session of 1865 William E. Stephenson was again elected President of the Senate. Among the new members of the House were James H. Ferguson of Cabell and H. C. McWhorter of Kanawha.

At the session of 1865 an amendment to the constitution was proposed, providing in effect that no person who had participated in the rebellion or given aid or comfort to the Confederacy should be deemed a citizen of the State or allowed to vote at any election. This amendment was voted on and afterwards adopted. This brings us to the close of the war.

It must not be inferred from what has been said that there was no division of sentiment among the people of the counties now composing the State of West Virginia on the question of secession and the formation of the new State of West Virginia. On the contrary, there was a very great division of sentiment, especially in the more Eastern and central counties. Large numbers of the people believed in the doctrine of State rights, and that their first allegiance was to the State of Virginia as between it and the Federal Government, and, although there were comparatively few who were originally in favor of the withdrawal of the State from the Union. yet when the alternative was presented of remaining in the Union and furnishing troops to fight against the Southern people who had withdrawn, or attempted to withdraw from the Union, or going with the State of Virginia in confederation with the other Southern States, they chose the latter course and large numbers of men from these counties went into the Confederate Army, and, in many instances, their families followed them through the lines and remained as refugees until the close of the war. A considerable part of the territory of West Virginia was the scene of active military operations during the war, and was held, a large part of the time, by the Confederate Army. Quite a number of raids and expeditions were made into the territory within the Union lines by the Confederates, and the same sort of raids and expeditions were made by the Union Army into the territory held by the Confederates. Companies of home guards were formed among the Union men, and within this territory and a large part of the State there was a division of neighbor against neighbor—sometimes between members of the same family and between the people of one part of the county against those of another part. Men were killed; property was carried away; men were arrested and carried off to prison; armies were piloted by adherents of one side and the other and advantage was taken of the situation by lawless men to commit violence and outrages of various kinds, and even in the legitimate prosecution of the war property of various kinds and stock and supplies were taken first by one army and then by the other, the Confederates taking from Union men and the Federals from those who adhered to the Southern cause. Those who adhered to the Union considered those that went with the

Confederacy as traitors to the Federal Government, while those that went with the South considered the Union men that refused to go with the State of Virginia as traitors to their State, each one looking at the question from his own standpoint, and this state of bitterness increased as the war went on, so that at the close of the war there was a very difficult and trying situation to deal with in the State of West Virginia. Those who had remained loyal to the Federal Government and had taken part in the formation of the new State, took the position that those who had gone with the Confederacy should not be allowed to participate in the Government, hold office or vote, or exercise the duties of any public position; that they should not be allowed to bring suits in Courts and that they should be responsible for the losses that had occurred to the Union men in the way of property carried off and destroyed or personal imprisonment inflicted by the Confederate troops. In turn, the Confederate soldiers and their friends and sympathizers claimed that they had accepted the result of the war in good faith; that they were entitled to belligerent rights for whatever had been done during the war; that these had been accorded to them by the terms of the surrender at Appomattox, and that they ought to be allowed to exercise all the rights of citiens. These matters are not mentioned for the purpose of reviving the bitter and unpleasant memories and antagonisms of the war, but as furnishing an explanation of the political history and events which occurred in the years following immediately after the close of the war.

In addition to the adoption of the amendment to the Constitution above mentioned, which provided in effect that no one who had participated in the rebellion or aided it should be considered a citizen of the State or have a right to vote at any election, statutes were passed requiring attorneys at law, teachers in public schools, jurors, voters and all officers to make oath that they had not, since the 20th of June, 1863. borne arms against the United States or the State of West Virginia, or voluntarily given aid or comfort to persons engaged in armed hostility thereto, etc. And the defendant in any suit brought could require the plaintiff to take such an oath. The effect of this legislation was to prevent all Confederate soldiers and all persons who had aided, counselled, advised or assisted the Confederate cause from exercising any of the rights or functions above mentioned. And a statute was also passed for the protection of the home guards, which provided that no suit should be maintained against any person for acts done in the suppression of the rebellion, and that it should be a sufficient defense to such suit or action to show that such act was done in obedience to the orders or by the authority of any civil or military officer of this State, of the re-organized government of Virginia, or the government of the United States. or that said act was done in aid of the purposes and policy of said authorities in retarding, checking and suppressing the rebellion. Chapter 97, Acts 1866. At the same time the Courts held that suits might be maintained by loyal persons against those who had been in the Confederate Army for injuries done by said Army to persons or property of loyal citizens, upon the theory that the Confederate Army was an unlawful conspiracy and enterprise; that all persons engaged in

it were responsible for what was done whether they actually participated in the act or not, provided they were with the command by which the injury was done. Actions of trespass on the case were brought in many of the counties to recover damages on this theory against returned Confederate soldiers, and many judgments were obtained.

At the election held in 1866, in many of the counties candidates were put forward by the Democratic, or what was known as the "Let-up" Party, and some of these candidates were elected to the legislature, but in the case of Confederate soldiers or sympathizers they were not allowed to take their seats because they could not take the test oaths.

At the session of the legislature of 1866, William E. Stephenson of Wood County was elected President of the Senate. Among other members elected were Henry M. Mathews of Greenbrier and John S. Burdett. Mathews was not permitted to take his seat as he could not take the test oath.

In his message to the legislature, Governor Boreman spoke of the bad faith of the late rebels in standing for office and recommended more stringent laws; but he did recommend that suitors' test oaths be modified so as not to apply to any act since the war.

An election for State officers was held in the Fall of 1866, Arthur I. Boreman being the candidate of the Republican party, and Benjamin H. Smith of Kanawha, for the Democratic or Let-up Party. Governor Boreman received 23,806 votes and Col. Smith 17,144 votes, showing the growth of the sentiment in favor of relaxing the rigors of the legislation against the Southern sympathizers.

At the session of 1867, Daniel S. Pennell was elected Speaker, and William P. Hubbard Clerk. Wesley Mollohan was a Committee Clerk. This legislature elected Peter G. VanWinkle and Waitman T. Willey United States Senators.

The following members of Congress were elected in 1866. Chester D. Hubbard from the First District. George R. Latham from the Second District and Kellian B. Whaley from the Third District.

At the session of the legislature of 1868 Henry C. McWhorter was elected Speaker.

In 1869, Solomon S. Fleming was elected Speaker; William E. Stephenson continuing President of the Senate.

Among the new members in 1869 were E. Willis Wilson of Jefferson, John J. Jacob of Hampshire, William H. H. Flick of Pendleton, in the House; in the Senate, Henry G. Davis of Mineral. At this session D. D. T. Farnsworth was elected President of the Senate, and during the session Governor Arthur I. Boreman was elected to the United States Senate for the term beginning March 4th, 1869; the Governorship devolving upon Mr. Farnsworth as President of the Senate for a short time.

An election for Governor was held in 1869, and William E. Stephenson was elected.

At the session of the legislature of 1869, Governor Stephenson recommended the repeal of the attorneys' and teachers' test oaths, and stated that he thought the wisdom of the further continuance of the suitors' test oaths was questionable. He also suggested the amendment of the

Constitution so as to restore the privilege of citizenship to those disfranchised. He uses this language:

"These restrictive measures were adopted during the time of great public peril. They were prompted by that instinct of self-preservation which impels every community to shield itself from present or impending danger. Under such circumstances prompt and decisive measures were imperatively demanded and those entrusted with authority did not hesitate to resort to them. These disabilities were not, however, intended to be perpetual, but only to remain in force until all danger to the public peace was past—until those upon whom they were imposed gave evidence that they accepted in good faith the result of the war, and until the permanency of the State was fixed beyond all question. These restrictions did not originate in a vindictive spirit, nor have they been adhered to by any considerable number of persons for unworthy purposes, etc."

At the session of the legislature of 1870, William M. Welch of Mineral County was elected Speaker.

Among the new members of the House were John J. Davis, Benjamin H. Smith, Henry Brannon, F. H. Pierpont, who had returned from Virginia to Marion County, and George C. Sturgiss.

At this session bills were passed repealing the attorneys', teachers' and suitors' test oaths, and Mr. Flick, who was a Northern man and had come into the State after the war, offered an amendment to the Constitution providing that all male citizens of the State should be entitled to vote. except the usual disqualified classes such as minors, persons of unsound mind, paupers, etc. This amendment was adopted by the Legislature and submitted to a vote of the people, and was afterwards adopted. By this legislation, the returned Confederate soldiers and those who had aided and sympathized with the Confederate cause were admitted to vote and were relieved of other political disabilities. The effect of this was to turn the State over to the Democrats; and at the general State election held in October, 1870, John J. Jacob, the Democratic or Let-up candidate for Governor, was elected, receiving 28,693 votes over William E. Stephenson, Republican candidate, who received 26,683 votes. John M. Phelps was elected Secretary of State, E. A. Bennett Auditor, and John S. Burdett Treasurer. The representatives in the Forty-first Congress were: for the First District, Isaac H. Duval; Second District, James C. McGrew; and Third District John S. Witcher, all Republicans; for the Forty-second Congress: First District, John J. Davis; Second District James C. McGrew; and Third District, Frank Hereford; Davis and Hereford being Democrats.

In the legislature which assembled in January, 1871, the Democrats had the majority in both Houses. Among the members of the House were E. Willis Wilson, of Jefferson; Henry Brannon, of Lewis, and James H. Ferguson of Cabell. Elbridge G. Cracraft, of Ohio County, was elected Speaker.

Among the Senators were Lewis Baker, of Ohio; William T. Ice, of Marion; Okey Johnson, of Wood; and Henry G. Davis, of Mineral. Lewis Baker was elected President of the Senate; and at this session Henry G. Davis was elected to the United States Senate, receiving fifty-three votes over James H. Brown, Republican, who received twenty-two votes.

At this session resolutions were introduced to compel the Baltimore & Ohio Railroad Company to modify its tariff charges and cease discriminations against the State of West Virginia and its citizens, and from

this time on there was quite an agitation looking to the correction of the evils under which the citizens of the State suffered by reason of such discrimination.

At the session of the legislature of 1871, a bill was passed submitting to the people the question of calling a Constitutional Convention. At the election held the next year this was ratified by the people, and the Constitutional Convention assembled in 1872, having among its members a large number of the most prominent men of the state.

At the session of the legislature of 1872, among the members elected were A. Brooks Fleming of Marion. and George C. Sturgiss of Monongalia. As showing how completely the Democratic party had obtained control of the State A. E. Summers, Democrat of Kanawha, was elected Speaker, receiving fifty votes over Charles M. Bishop, Republican, who received only five votes.

The Constitutional Convention of 1872 assembled in the city of Charleston. Samuel Price of Greenbrier County, who had been Lieutenant-Governor of Virginia, was elected President. This Convention adopted a new constitution. The Democrats were in complete control of the Convention.

This Constitution provided that all persons residing in the State born or naturalized in the United States and subject to the jurisdiction thereof with great efficiency. After his term was out he was elected President shall be citizens of the State.

Many of the members of this Convention had been soldiers in the Confederate army and others had sympathized with and aided the South in the war between the States, and they succeeded in having inserted in the new Constitution certain provisions which were intended to prevent a recurrence of the conditions which existed during the years immediately following the war. This accounts for sections 11 and 12 of the bill of rights, which are as follows:

"11. Political tests, requiring persons, as a prerequisite to the enjoyment of their civil and political rights, to purge themselves by their own oaths, of past alleged offenses, are repugnant to the principles of free Government, and are cruel and oppressive. No religious or political test oath shall be required as a prerequisite or qualification to vote, serve as a juror, sue, plead, appeal, or pursue any profession or employment. Nor shall any person be deprived by law, of any right, or privilege, because of any act done prior to the passage of such law.

12. Standing armies in time of peace, should be avoided, as dangerous to liberty. The military shall be subordinate to the civil power; and no citizen, unless engaged in the military service of the State, shall be tried or punished by any military court for any offence that is cognizable by the civil courts of the State. No soldier shall, in time of peace, be quartered in any house without the consent of the owner; nor in time of war except in the manner to be prescribed by law."

These provisions of section 12 above quoted have been recently invoked on behalf of some of the striking miners in the Cabin Creek and Paint Creek coal fields, who were arrested under martial law proclaimed by the Governor and held and tried by a Military Court. But the right of the Governor to proclaim martial law and the power of the Military Court to detain and imprison persons charged with offences within the martial law zone was upheld by a majority of the Court of Appeals

notwithstanding these Constitutional provisions, on the ground of necessity.

This constitution also contained the following provision:

"No citizen of this State who aided or participated in the late war between the government of the United States and a part of the people thereof, on either side, shall be liable in any proceeding, civil or criminal; nor shall his property be seized or sold under final process issued upon judgments or decrees heretofore rendered, or otherwise, because of any act done in accordance with the usages of civilized warfare in the prosecution of said war. The Legislature shall provide, by general laws, for giving full force and effect to this section." Article 8, Section 20.

The validity of this provision was sustained by the Supreme Court of the United States in the case of Freeland v. Williams, 131 U. S. 405.

Quite a number of the members of this Convention had been office holders under the Government of Virginia before the war, and this accounts for certain re-actionary provisions in this Constitution of 1872, such as the establishment of County Courts consisting of a President and two Justices of the Peace, which Courts were given original jurisdiction in all matters of law where the amount in controversy exceeded $20.00, and in habeas corpus, quo waranto, mandamus, prohibition, certiorari and all suits in equity and of all criminal cases under the grade of felony as well as probate jurisdiction and the management of the fiscal affairs of the county. This kind of a court under the old Virginia system had ordinarily been quite a satisfactory tribunal for the trial of cases at law and in equity because in the earlier history of the State the office of Justice of the Peace was generally bestowed upon the most intelligent and public spirited citizens who took the office without expectation of reward as a matter of public service. Under this Constitution, however. the fee system was established and it was found that very often inferior men were elected Justices of the Peace, and the County Courts were found to be very unsatisfactory tribunals for the trial of important cases. Finally the Constitution was amended in 1891, so that these tribunals were abolished and substantially the provisions of the Constitution of 1863 restored.

Many of the members of this Convention had been deprived of the right to vote by the registrars under the registration law, which was in force after the war, because in many instances they were not able to take the test oaths, and in other instances the power of the registrars was exercised more or less arbitrarily, as it was claimed by them. They sought to prevent such a thing occurring again by a Constitutional provision, and they inserted in the Constitution the following:

"No citizen shall ever be denied nor refused the right and privilege of voting at an election because his name is not or has not been registered or listed as a qualified voter." Const.' Art.. 4 sec. 12.

The unwisdom of such a constitutional provision became manifest especially to the members of the Democratic party in after years, when the population of the State had become largely increased by great numbers of negroes from Virginia and the other Southern States coming into the mining regions of the State, especially in the southern part, and by a large floating population of miners, lumbermen and others engaged in developing the great resources of the State. This class of population

being more or less migratory, and there being no registration law, it was found that there was no way to prevent them from voting before they had attained citizenship and of repeating at the elections, especially if the election officers were careless or corrupt or intensely partisan in their actions. All good citizens of the State recognized the importance of repealing this Constitutional provision in order to have fair elections, and it was repealed by an amendment submitted by the legislature of 1901, in the following language:

"The legislature shall enact proper laws for the registration of all qualified voters in this State."

While this Constitution of 1872 contained these reactionary provisions, in many respects it marked a decided advance in constitutional government and met the new conditions which had arisen in the commercial and industrial world. Among other things, it had certain provisions to prevent log-rolling and improper methods of legislation. It prohibited the passing of local and special laws in a great many cases. requiring that in all such cases provisions should be made by general laws, and that no special act should be passed where a general law would be proper. This provision of the Constitution has relieved the legislature of the great burden of passing private and special acts. It also provided for homestead exemption, and required that the legislature should pass laws necessary to protect the property of married women from the debts, liabilities and control of their husbands. It contained important new provisions in regard to the formation and powers of corporations, giving minority stockholders representation on Boards of Directors, requiring railroads to make annual reports to the Auditor, and providing that the legislature should pass laws regulating the charges for transportation of passengers and freights and discriminations on the part of the railroads. It also provided for an efficient system of free schools which has since become very creditable and efficient and a matter of pride to the citizens of the State. It also provided for the forfeiture of lands for failure to place them on the assessment books, which provision, while it has tended to the settlement of the land titles in West Virginia, has led to a great deal of litigation and the building up of one of the most complicated and abstruse branches of the law.

At the first election held under the new Constitution, there was a split in the Democratic party. The regular Democratic Convention nominated Johnson N. Camden for Governor. There was dissatisfaction and charges of improper practice in the control of the convention, and Governor John J. Jacob ran as an independent candidate and was supported by the Republican party. Governor Jacob was elected, receiving 42,888 votes, Mr. Camden receiving 40,305. The other candidates on the regular Democratic ticket for State offices were elected, namely: B. W. Byrne, Superintendent of Free Schools; Edward A. Bennett, Auditor; John S. Burdett, Treasurer, and Henry M. Mathews, Attorney-General.

The first legislature under the new Constitution assembled at Charleston November 16th 1872. William M. Miller, of Ohio County, was elected Speaker, receiving 44 votes over William Price, of Monongalia, who received 17 votes. D. D. Johnson, of Tyler County, was elected

President of the Senate Among the members of the Senate were Jonathan M. Bennett, Gideon D. Camden and Septimius Hall.

This legislature was a very important one as it was necessary to adapt the statutes of the State to the new provisions of the Constitution, and quite a large number of acts were passed for this purpose. The Constitution of 1872 provided for biennial sessions of the legislature.

At the session of the legislature of 1875, Allen T. Caperton was elected United States Senator, after a contest lasting from January 26th to February 17th. On the final vote he received 68 votes, R. L. Berkshire 14 votes, George W. Thompson 1 vote and C. P. T. Moore 1 vote. During the contest the voting was general and very much scattered, the leading candidates besides Mr. Caperton being Henry S. Walker, Samuel Price and Johnson N. Camden.

The representation in Congress at that time was United States Senator Henry G. Davis for the term commencing March 4th, 1871, and Allen T. Caperton for the term beginning March 4th, 1875; in the House of Representatives: First District, Benjamin Wilson; Second District, Charles J. Faulkner; and Third District, Frank Hereford, all Democrats. Alexander Monroe was Speaker at this session and D. D. Johnson President of the Senate.

In 1878 there was an election for State officers. At this election the Republican party was thoroughly organized and showed that it was increasing in strength. Henry M. Mathews, of Greenbrier County, was nominated by the Democrats for Governor, and Nathan Goff, Jr., by the Republicans. Mr. Mathews was elected, receiving 56,206 votes, Nathan Goff receiving 43,477. Mathews had been a gallant Confederate soldier, and Goff had been a gallant Union soldier. The campaign was a spirited and brilliant one. The other State officers were Democrats, as follows: William K. Pendleton, State Superintendent of Free Schools; Joseph Miller, Auditor; Thomas J. West, Treasurer, and Robert White, Attorney-General.

Among the members of the legislature of 1877 were such men as E. Boyd Faulkner, J. B. Summerville, James H. Ferguson, E. W. Wilson, William A. Quarrier and John A. Robinson. Eustice Gibson was elected Speaker, and J. B. Peyton, Clerk.

Among the members of the Senate were R. L. Berkshire, Alfred Caldwell, R. F. Dennis, D. D. Johnson and U. N. Arnett, the latter of whom was elected President.

Senator Allen T. Caperton having died, and the term of office of Hon. Henry G. Davis as United States Senator having expired, two Senators were elected at this Session. Henry G. Davis was re-elected, receiving 60 votes, Charles J. Faulkner 19 votes, G. D. Camden 3, and John Brannon, B. W. Byrne, John J. Davis and Daniel Lamb 1 vote each. Frank Hereford, of Monroe County, was elected to fill the unexpired term of Mr. Camden, he receiving 70 votes. The chief contest in this Senatorial election was between Hon. Henry G. Davis and Charles J. Faulkner for the long term, and Samuel Price, Frank Hereford and Henry S. Walker for the short term.

The question of West Virginia's portion of the Virginia debt had received more or less attention from time to time since the formation of

West Virginia. Overtures had been made to Virginia for the appointment of commissioners to adjust the matter, and a committee of the legislature had been sent to Richmond to ascertain the facts, and had made a report finding a small amount due from this State to Virginia; but the State of Virginia declined to enter into the negotiations and took no steps for the settlement of the debt, having however set apart one-third of the debt to West Virginia, and issued certificates to the bondholders which were known as West Virginia certificates. These certificates were traded in on public exchanges and sold at five or ten cents on the dollar, and the impression was abroad in the country that West Virginia was not meeting her just obligations.

At the session of 1879, Governor Mathews called attention to this condition and complains that Virginia had arbitrarily set apart one-third of the debt to West Virginia, and that Virginia had no interest in settling the matter because of the arrangement she had made with her creditors. He said: "It is not probable that Virginia will urge a settlement because whenever she does she can be called upon to settle with her creditors." He then says:

> "If we are indebted to Virginia, the debt should be promptly recognised and provisions made for its payment. Whatever may be the result of accounts between the States the matter should be finally set at rest."

It may be proper to say just here that in view of this attitude of the State of Virginia toward the debt question, and in view of the fact that a committee of the legislature of West Virginia had ascertained that there was practically nothing due from this State to Virginia on a settlement, subsequent legislatures adopted resolutions to the effect that West Virginia was not liable for any portion of the Virginia debt, and subsequently, the State of Virginia, having so arranged her own portion of the debt as to obtain an absolute release from the one-third which she had set apart as West Virginia's portion, was induced by the holders of these so-called West Virginia certificates to bring a suit in the Supreme Court of the United States for the settlement of the debt question, although the State of Virginia herself had no real interest in the settlement of the question. But the Supreme Court maintained its jurisdiction and the matter is still pending; that Court having found that according to a basis of settlement which it considers proper, West Virginia's portion of the debt is something over $7,000,000.00, leaving the question of interest undecided, and suggesting that the whole matter should be arranged between the two States on an equitable basis. At the last session of the legislature of West Virginia, the Governor was authorized to appoint a commission to take the matter of this debt settlement up with the State of Virginia. The history of this debt question shows that the State of West Virginia was not at fault in the postponement of the settlement of the debt; that for the first fifteen or twenty years after the separation she endeavored to bring about an adjustment, but her efforts in this direction were not met by the State of Virginia, and that the State of Virginia never showed any interest in the settlement of the debt until she, herself, had re-adjusted her debt and been released abso-

lutely from one-third of it without reference to whether West Virginia owed that amount or not.

At the session of 1879, the question of excessive railroad freights and tariff and discrimination against the State of West Virginia and its citizens by the Baltimore & Ohio Railroad was the subject of an elaborate report both to the Senate and the House of Delegates, and a resolution was adopted providing for a joint committee of the two houses to confer with the Baltimore & Ohio Railroad on this question. and the Attorney-General was directed to institute legal proceedings by quo warranto or otherwise against the Baltimore & Ohio Railroad Company for forfeiture of its charter because of these alleged excessive charges and discriminations. This matter became a burning issue in the politics of the State during the years that followed; one of the most active men in the matter of correcting the alleged abuses by the Railroad Companies being the Hon. E. Willis Wilson, then of Jefferson County.

In 1880 there was an election for State officers. The contest for the Democratic nomination for Governor was mainly between Hon. Jacob B. Jackson of Parkersburg and Hon. Charles J. Faulkner of Martinsburg, Mr. Jackson receiving the nomination after a very spirited contest. Mr. Faulkner had been quite prominent in public affairs, being then a member of the House of Representatives, and having been the minister of the United States to France under President Buchanan. Mr. Jackson was a prominent lawyer, a brother of Hon. John J. Jackson, who had been appointed Judge of the United States District Court for West Virginia by President Lincoln, and also of Judge James Monroe Jackson. The Republican nominee for Governor was George C. Sturgiss, of Morgantown. The Greenback party also had a ticket in the field, Napoleon B. French being its candidate for Governor. The Democratic ticket was elected. The vote was as follows: for Governor, Jacob B. Jackson, 60,991 votes; George C. Sturgiss, 44,855 votes, and N. B. French, 13,027 votes. The other State officers elected were Joseph S. Miller, Auditor; Thomas O'Brien, Treasurer; B. L. Butcher, Superintendent of Free Schools, and C. C. Watts. Attorney-General.

The legislature of 1881 was an important one. The Constitutional amendment changing the judicial system, increasing the Supreme Court of Appeals to four judges, and abolishing County Courts as trial Courts had been submitted by the legislature of 1879 and adopted by the people, and the legislature of 1881 went into an extensive revision of the statutes of the State, and the Acts of 1881 and 1882, Extra Session, constitute almost a complete revision of the statute law of the State, adapting it to the changes in the Constitution and making other important changes.

Among the members of the House of Delegates of 1881 were William A. Quarrier, James H. Ferguson and E. W. Wilson from Kanawha County, Andrew Edmiston of Lewis, James Morrow, Jr., of Marion, William P. Hubbard, of Ohio, and George H. Moffit of Pocahontas. E. Willis Wilson was elected Speaker, receiving 62 votes, all the votes of the House except three.

During this session Mr. Wilson introduced resolutions directing the Railroad Committee to inquire into discriminations and abuses by the railroads.

In the Senate among the members was William M. O. Dawson, who afterwards became Governor, and Joseph VanMeter, who was a candidate for Governor.

At the sessions of the legislature of 1883 and 1885, there was no very important legislation. but about this time the Supreme Court of Appeals had held in the case of Miller, Auditor, against the Chesapeake & Ohio Railroad Company that the legislature had no power to exempt the property of the Railroad Company, or any other kind of property, from taxation, interpreting strictly the provision of the Constitution of 1872, which provided that taxation should be equal and uniform throughout the State, and Governor Jackson called attention to this decision and the provision of the Constitution and recommended that the laws be amended for the equalization of taxes in accordance with this decision of the Supreme Court, and a commission was appointed to take this whole matter into consideration, the result of which was that the assessment laws were changed and property that had been exempted from assessment was brought upon the tax lists.

An amendment to the Constitution was submitted and adopted about this time, changing the time of the State election from October to November, the same date as the National election. It had been found that as the State of West Virginia was one of a few States whose election was held in October preceding the National election and in the same year, the election in this State and other States similarly situated attracted National attention and the State matters were lost sight of in order to carry the State for its effect on the succeeding National election, and it was thought best to hold the State election and the National election on the same day.

In the legislature of 1883, among the members of the House of Delegates were Henry B. Gilkeson, Charles W. Lynch, James H. Brown and James F. Brown, the two latter from Kanawha County, being father and son, the one elected on the Republican ticket and the other on the Democratic ticket, John M. Collins. C. W. Dailey and B. B. Dovener, of Ohio County. Joseph J. Woods was elected Speaker.

In the Senate appeared Nathan B. Scott and Benjamin W. Byrne, of Kanawha. Thomas J. Farnsworth was elected President of the Senate over W. M. O. Dawson.

In the legislature of 1885, Daniel B. Lucas and R. P. Chew, of Jefferson County; A. F. Haymond, of Marion; Governor John J. Jacob, Robert White and C. P. Dorr, of Webster County, were among the members of the House. Thomas H. Dennis, of Greenbrier County, was elected Speaker over H. C. McWhorter by a vote of 37 to 27.

The State election of 1884 was rather a notable one. Hon. E. Willis Wilson made a campaign for the Democratic nomination for Governor, chiefly as an advocate of the correction of the abuses of the railroads of the State in the matters of excessive charges and discriminations against the State of West Virginia and its citizens. His chief opponent for the nomination was Hon. E. Boyd Faulkner, of Martinsburg. Mr. Wilson was nominated; Edwin Maxwell, of Harrison County, being the Republican nominee. The Republican party was gradually gaining

in strength throughout the State. The lumber, mining and manufacturing interests of the State were largely in favor of a protective tariff advocated by the Republican party, and there was a large increase of population from adjacent States of Pennsylvania, Ohio and other Northern States who were engaged in these industries as well as a large number of negroes from the South, who almost uniformly voted the Republican ticket. Mr. Wilson was elected Governor, receiving 71,438 votes to Mr. Maxwell's 66,149. The other officers on the Democratic ticket were elected as follows: P. F. Duffy, Auditor; W. T. Thompson, Treasurer, Benjamin S. Morgan, Superintendent of Free Schools, and Alfred Caldwell, Attorney-General.

At the session of 1885, John E. Kenna was elected to the United States Senate to succeed Henry G. Davis, whose term had expired and who declined to stand for re-election. Mr. Kenna had been a member of the House of Representatives and had attained a high position in that body. His principal opponents in the Democratic caucus for the office of United States Senator were William A. Quarrier, of Kanawha, and Henry M. Mathews, of Greenbrier.

Among the members of the State Senate at this Session were J. B. Summerville, P. W. Morris, John W. McCreery, William M. O. Dawson and S. L. Flournoy. George E. Price was elected President of the Senate, and John D. Alderson, Clerk.

The capital of the State had been at Wheeling since the year 1875, but the matter of the removal of the capital had been submitted to a vote of the people, the vote being taken between the cities of Charleston, Clarksburg and Martinsburg. The city of Charleston receiving a majority of the votes, the capital was restored to Charleston in the year 1885, and the Session of the legislature of 1887, met in the city of Charleston. John M. Rowan was elected speaker of the House of Delegates, and George E. Price, President of the Senate.

The most notable matter of this session was a deadlock in the election of a United States Senator. The Demcoratic party had a safe majority on joint ballot, but twelve of the Democratic members refused to go into the Democratic caucus. Hon. Johnson N. Camden was nominated by the Democratic caucus without the presence of these twelve members, and they refused to vote for him in open session, basing their refusal upon allegations of improper and corrupt political methods and manipulation on the part of Mr. Camden. The session was marked by great bitterness on account of this contest, and ended without electing a United States Senator and without passing the general appropriation bill. The term of Johnson N. Camden as United States Senator expired on the 4th of March, 1887, and as there had been no election of his successor Governor Wilson, considering that there was a vacancy, which he as Governor had the right to fill by appointment, appointed the Hon. Daniel B. Lucas, who had been one of the twelve members who refused to vote for Mr. Camden, to fill the supposed vacancy. As the general appropriation bill had not been passed at the regular session and the State government was crippled on this account, Governor Wilson convened the legislature in extra session on the 20th day of April, 1887, specifying the matters to be considered at such extra session, but not naming the election of a United

States Senator among the matters so specified. When the extra session convened, the proposition was made to proceed with the election of a United States Senator. It was opposed on the ground that the legislature had no power to enter upon any business at an extra session except such as was specified in the proclamation of the Governor calling the Session, but it was contended on the other hand that the election of a United States Senator is governed and regulated by the Constitution and statutes of the United States and not by the State Constitution. This view prevailed and Charles J. Faulkner was elected to the United States Senate after the balloting had continued until May 5th. He received 48 votes, William H. H. Flick, Republican, receiving 31 votes, and there were 10 scattering votes. The Senate of the United States afterwards refused to seat Mr. Lucas, but did seat Mr. Faulkner, holding that his election was legal and regular.

At the election in the Fall of 1888, A. B. Fleming, of Marion County, was the Democratic nominee for Governor, and Nathan Goff, Jr., of Harrison County, the Republican candidate. On the face of the election returns General Goff received 78,714 votes and Judge Fleming 78,604 votes, giving Goff a plurality of 110 votes on the face of the election returns. Upon the Assembling of the legislature of 1889, Judge Fleming filed his petition and notice contesting the election of General Goff, and specifying a large number of votes which had been counted for Goff as being illegal. The Democrats had a small majority on joint ballot. General Goff presented his counter-notice denying the charges of illegal votes contained in Fleming's notice and specifying a large number of votes that were cast for Fleming claimed to be illegal. In accordance with the provisions of the Code, the contest was referred to a joint committee of the two houses—two members from the Senate, P. W. Morris and Edwin Maxwell, and three members from the House of Delegates, W. E. Lively, W. L. Kee and Joseph Sprigg. And the legislature also on joint ballot resolved to postpone the publishing and declaration of the result of the vote for the office of Governor until the contest could be decided. The legislature adjourned, subject to the call of the Governor when the committee should be ready to report. A large amount of testimony was taken and the legislature was re-convened in extra session on the 15th day of January, 1890, for the purpose of determining the contested election and other purposes mentioned in the proclamation of the Governor. There was a majority and a minority report, the majority report being signed by the members of the committee elected by the House of Delegates, being Democrats, and the minority by the members elected by the Senate, who were Republicans. The majority reported in favor of declaring Fleming elected and the minority in favor of Goff. Ten hours was allowed to the contestants or their counsel on each side to argue their case before the joint assembly; then six hours each was allowed to the majority and minority members of the contest to discuss the matters involved in the report, after which the members of the legislature discussed the matter at some length. Whilst a great many votes were attacked as illegal from different counties of the State, yet the main allegations of fraudulent voting related to McDowell and Mercer counties. It was claimed on behalf of Fleming, the contestant, that

several hundred votes were cast by negroes in the counties of McDowell and Mercer, who had not resided in the State a sufficient length of time to give them the right to vote; that the evidence showed that the Norfolk & Western Railroad had been quite recently built into that section and coal mines opened there, and that these negroes, who were charged to have voted illegally, had come into those counties from Virginia and the Southern States, within the year before the election, and that many of them were mere migratory transitory miners with no fixed habitation. The pay-rolls of the coal companies were used to show when these men were first employed in that section, as well as other evidence. On behalf of the contestee it was claimed that the evidence of these facts was insufficient; that there was no direct and positive evidence as to the illegality of these votes and as to the time of their residence in the State sufficient to justify throwing them out. Upon the final vote in the joint assembly upon the resolution declaring A. B. Fleming duly elected to the office of Governor, there were 43 ayes, and 40 noes, and so A. B. Fleming was declared elected Governor for the term beginning March 4th, 1889. There was a great deal of feeling and bitterness in this contest and growing out of it, the Republicans claiming that General Goff had been improperly deprived of the office to which he was elected on insufficient evidence. The Democrats however justified their action charging gross frauds on the part of the Republicans in the election, and maintaining that the evidence was abundant as to these frauds, and that by the most liberal count Fleming had a substantial majority of the legal votes cast.

Nearly a whole year of the term of Governor Fleming had expired before this contest was decided. Meantime Governor E. Willis Wilson continued to occupy and exercise the duties of the office of Governor. Gen. Goff had applied to the Supreme Court for a mndamus to compel Governor Wilson to yield up the office to him, claiming that as he was elected on the face of the returns he was *prima facie* entitled to the office pending the contest, and that Wilson had no right to hold over. But the Supreme Court refused the writ, holding that the legislature was the final judge of the election and until it had declared the result the present incumbent continued to hold the office.

At this session of the legislature there was a deadlock in the Senate in the election of a President of that body. R. S. Carr, of Kanawha County, had been elected as a kind of independent Republican. There were 13 Democratic members and 15 Republican members, including Senator R. S. Carr, and Senator Minear from Tucker County. These two refused to go into the Republican caucus. The Senate balloted from the 9th of January until the 22nd, and on the last day elected R. S. Carr President of the Senate. After the adjournment of the regular session of 1889 without counting the votes for Governor or declaring the result of the election as to that office, R. S. Carr as President of the Senate. claiming that there was a vacancy in the office, brought an action of mandamus against Governor Wilson to compel him to yield up the office to him, but the Supreme Court of Appeals decided, as in the case of Goff against Wilson, that there was no vacancy, and that the President of the Senate did not become Governor, but that Governor Wilson held

over until the contest between Fleming and Goff should be decided. It will be seen that the Republican party had grown until the contest between the two parties was very close.

At the session of 1889, John E. Kenna was re-elected to the United States Senate. There was a Democratic majority of 1 on joint ballot. Mr. C. P. Dorr, of Webster County, a Democratic member, refused until the day before the legislature adjourned to go into the caucus or to vote for Mr. Kenna, and there was no election until February 21st, the day before the time for adjournment expired, which was on the 22nd.

At the legislature of 1891 the Democrats had a considerable majority in the House of Delegates while the Senate was Republican.

At the session of 1893, there were two United States Senators to elect, the term of Hon. Charles J. Faulkner having expired and Hon. John E. Kenna having died in office. Mr. Faulkner was re-elected to succeed himself, and Johnson N. Camden was elected to fill out the unexpired term of Mr. Kenna. The legislature of 1893 adjourned without passing the general appropriation bill and an extra session was immediately called by the Governor for that purpose, no other business being specified in the call. D. W. Shaw, of Barbour County, was elected Speaker.

At the election held in November, 1892, for State officers, William A. MacCorkle, of Kanawha County, received for the office of Governor 84,585 votes; Thomas E. Davis, the Republican candidate, receiving 80,663. The Democratic candidates for the other State offices were elected as follows: Auditor, Isaac B. Johnson; Treasurer, J. M. Rowan; Superintendent of Free Schools, Virgil A. Lewis, and Attorney-General, Thomas S. Riley

The Republicans had a majority in both branches of the legislature of 1895.

At this session of the legislature Governor MacCorkle sent in a special message accompanied by communication from the Governor of Virginia, announcing the appointment of a Commission of six under a joint resolution of the General Assembly of Virginia to take into consideration the settlement of West Virginia's portion of the Virginia debt, and in connection with this communication the House of Delegates ordered to be printed the report of the Virginia Debt Commission of 1871. The resolution providing for the appointment of a Commission to take into consideration all matters pertaining to the Virginia debt was not acted upon, but a resolution was adopted to the effect that the legislature declined to enter into any negotiation with the Debt Commissioners or Commission appointed under a joint resolution of the General Assembly of Virginia looking to a settlement of the Virginia debt question on the basis set forth in said joint resolution. This resolution was unanimously adopted by the House and was also adopted by the Senate.

At the election held in November, 1896, the Republican State ticket was elected; for Governer, George W. Atkinson, Republican, received 105,629 votes; C. C. Watts, Democrat, 93,559 votes. The other State officers being L. M. LaFollette, Auditor; M. A. Kendall, Treasurer; J. R. Trotter, Superintendent of Free Schools, and Edgar P. Rucker, Attorney-General. The Republicans had a majority in both houses. S. R. Hanan, of Marshall County, was elected Speaker over W. H. McClung; Hanan receiving 41 votes and McClung 28.

At the Session of 1899, the Democrats had a majority in the House of Delegates. But the Republicans had a majority in the Senate, and by unseating temporarily one of the Democratic Senators secured a majority on joint ballot in the Joint Assembly. On the final vote Nathan B. Scott, of Ohio County, was elected to the United States Senate, receiving 48 votes; John T. McGraw, the Democratic caucus nominee, receiving 46 votes, and Nathan Goff one vote.

At the election held in November, 1900, the Republican ticket was elected; A. B. White, Republican candidate for Governor, receiving 118,798 votes, and John H. Holt, Democrat, receiving 99,282. The other State officers elected were Arnold C. Scherr, Auditor; Peter Silman, Treasurer; T. C. Miller, Superintendent of Free Schools, and R. H. Freer, Attorney-General. The Republicans had a majority in the legislature in both houses and at this session Stephen B. Elkins was elected to the United States Senate. He received a total of 61 votes to 23 votes for John T. McGraw, the Democratic candidate.

In the legislature of 1903, the Republicans had a majority in both houses.

At the session of the legislature of 1901, the Governor was authorized to appoint a Commission to draft bills for the revision of the tax assessment and revenue laws. Under this bill the Governor appointed J. K. Thompson, L. J. Williams, W. P. Hubbard, H. G. Davis and John H. Holt. This Commission made an elaborate report and recommendations to the legislature of 1903, but no action was taken at the regular session on the report, and Governor White convened the legislature in extra session on the 26th of July, 1904, for the purpose, among other things, of considering the bills prepared by this Commission, and at this extra session bills were passed revising the manner of assessment for taxes.

At the State election held in November, 1904, the Republican State ticket was elected by a considerable majority as follows: William M. O. Dawson for Governor received 121,540 votes; John J. Cornwell, Democrat, 112,457 votes; the other officers elected being Charles W. Swisher, Secretary of State; Thomas C. Miller, Superintendent of Free Schools; Arnold C. Scherr, Auditor; Newton Ogden. Treasurer, and Clark W. May, Attorney-General; the office of Secretary of State having been made elective by amendment to the Constitution. The Republicans had a considerable majority in each house of the legislature, and at this session Nathan B. Scott was re-elected to the United States Senate, receiving 58 votes; John T. McGraw receiving 23 votes.

In the message of Governor Dawson to the legislature of 1907, he urges a revision of the tax laws so that all property shall be taxed at its true and actual value, and that all kinds of property shall be brought upon the tax books. These views of Governor Dawson entered largely into the political campaigns about this time, but they were finally enacted into laws and the valuation of property was largely increased, but it was found necessary to pass stringent restrictions upon the levying bodies such as the county courts, boards of education and city governments, so as to prevent excessive burdens being laid upon the tax-payers by reason of these increased valuations. James A. Seaman, of Jackson

County, was elected Speaker, receiving 68 votes to 26 votes for John A. Preston, of Greenbrier, Democratic candidate.

An extra session of the legislature was called by Governor Dawson to be held on the 3rd of January, 1908, mainly for the purpose of revising the assessments and license laws, and also the limiting of the levying bodies in the amount and rate of levies for taxation, and also to amend the election laws.

There had been serious charges of gross frauds in the primary conventions and primary elections in connection with the nominations of the Republican party for State officers, and when the Republican State Convention met in 1908 to nominate a State ticket there was a split in the convention. The regular convention nominated Charles W. Swisher for Governor, and a large number of delegates who withdrew from that convention into another hall, nominated Arnold C. Scherr for Governor. Lewis Bennett was nominated by the Democrats. A bitter factional war was waged between the friends of C. W. Swisher and Arnold C. Scherr, and toward the end of the campaign an arrangement was made by which both Swisher and Scherr withdrew, and William E. Glasscock, of Monongalia County, was selected as the Republican nominee for Governor. This split in the Republican party affected the vote very considerably, but the Republican ticket was elected; Glasscock, Republican, receiving 130,807 votes, and Lewis Bennett, Democrat, receiving 118,974 votes; the other officers elected being Stuart F. Reed, Secretary of State; John S. Darst, Auditor; E. L. Long, Treasurer; M. P. Shawkey, Superintendent of Free Schools, and William G. Conley, Attorney-General.

At the session of the legislature of 1909, J. H. Strickling was elected Speaker of the House of Delegates. He received 59 votes, and Septimius Hall, Democrat, received 25 votes.

At the session of the legislature of 1911, the Democrats had a majority in the House of Delegates. C. M. Wetzel, of Jefferson County, was elected Speaker, receiving 61 votes over J. A. Strother, who received 22 votes.

Since the last session of the legislature the Hon. Stephen B. Elkins, United States Senator, had died and the term of Hon. Nathan B. Scott being about to expire, two United States Senators were elected at this session. In the Joint Assembly the Republican members absented themselves and refused to vote. On the vote in Joint Assembly for the long term, William E. Chilton received 71 votes, 4 votes scattering; the votes necessary to a choice on joint ballot 56. For the short term Clarence W. Watson received 70 votes, 7 votes scattering.

The political history of West Virginia would not be complete without some account of its relation politically to the National government. Under our system of making party nominations, the different parties, looked at from a National standpoint, control the politics largely in the different states. Party organization is the same both in its connection with National elections and State elections, and, speaking generally, there has been little difference in the vote in West Virginia on the National ticket as compared with the State ticket.

In the campaign of 1896, Mr. William J. Bryan was the regular Democratic candidate for President. The great issue in this campaign

arose over the National currency, Mr. Bryan advocating the policy of free coinage of silver at the ratio of 16 to 1. Upon this issue there was a considerable split in the Democratic party both in the Nation and in West Virginia. There was an independent Democratic ticket for President and Vice President, headed by Palmer and Buckner, known as the Gold Democrats. A considerable number of Democrats in the State of West Virginia refused to vote for Mr. Bryan on this issue. Some of them voted for Palmer and Buckner and others voted for William McKinley, the Republican nominee. Others refrained from voting. Many of those who voted for McKinley remained after that in the Republican party. It was at this election that the Republican State ticket was elected for the first time in many years Governor Atkinson being elected over General Watts as we have stated above. The divisions of this campaign continued to affect the Democratic party in the next Presidential campaign when Mr. Bryan was again the candidate, though not to the same extent.

A parallel condition of things arose in the Republican party of 1912. In that year there was a split in the National Republican Convention. President Taft being re-nominated by the regular Convention, and Ex-President Roosevelt being nominated by those who were dissatisfied with Mr. Taft's nomination and other independents under the name of the National Progressive party. So great was the dissatisfaction with Mr. Taft's administration and with the manner of his nomination that the Roosevelt electors received a larger vote in West Virginia than those of Mr. Taft, and the result was that the State was carried by the Democratic electors. The election resulted in the choice of Woodrow Wilson, the Democratic candidate for President. Whilst this division in the Republican party affected the vote on the State ticket considerably, yet both factions of the party united in the support of the Republican State ticket, which had been nominated before the National Convention was held, and the result was the election of Dr. H. D. Hatfield, Republican, as Governor over William R. Thompson, the Democratic nominee, and also the election of a Republican legislature, which chose a Republican successor to Senator Watson in the person of Hon. Nathan Goff.

West Virginia has furnished a number of men who have taken quite prominent positions in the National government. Without attempting to enumerate all of these, it is proper to call attention to some of them.

Hon. Henry G. Davis has been a conspicuous figure in West Virginia's political history almost from the time of the formation of the State until the present time. He, Senator Camden, Daniel Lamb, the Jacksons and the Johnsons and others were largely instrumental in building up the Democratic party after the war, and relieving the Confederate soldiers and Southern Sympathizers of their political disabilities. These men had been Union men during the war, but they early adopted the policy of doing away with the animosities and consequences of the war, and encouraged the people to address themselves to the development of the great resources of the State. No man did more in these matters than Senator Davis. As we have seen, he was elected to the United States Senate in 1871, and re-elected in 1875, declining re-election at the end of his second term. He continued to be influential in State and National

matters and he was selected by the President on important commissions. He was appointed, as we have seen, on the State Tax Commission for revising the assessment laws of the State in 1901, and in 1904 he was the Democratic nominee for Vice-President with Altman B. Parker, of New York, the nominee for President. Senator Davis has always been noted for his fine public spirit, his splendid charities in the way of establishing schools hospitals, aiding Young Men's Christian Associations and asylums for orphan children, and is still a conspicuous figure in all matters pertaining to the advancement and development of the State.

One of the most noted figures in West Virginia politics, both State and National, has been Hon. Nathan Goff, Jr. He was a gallant officer in the Union Army. He was early appointed United States District Attorney for West Virginia and filled that position very efficiently and ably for a number of years; was the Republican nominee for Governor and a party to the memorable contest over the office of Governor with A. B. Fleming in 1889. He was afterwards appointed to the position of Secretary of the Navy under President McKinley, and subsequently made United States Circuit Judge for the Fourth Judicial Circuit composed of the States of West Virginia, Virginia, Maryland, North Carolina and South Carolina, and has filled this important judicial position with great credit to himself and great satisfaction to the Bar and the people of the Circuit. Gen. Goff has always been recognized as one of the most brilliant and effective political stump speakers that the State of West Virginia has produced. Without solicitation or effort on his part, he was elected to the United States Senate by the legislature of 1913; his election growing out of a deadlock in the Republican party over the election of a Senator, the leading candidates for that office being Davis Elkins, Isaac T. Mann and William Seymour Edwards.

Another conspicuous figure in National politics was Hon. William L. Wilson, of Jefferson County. Mr. Wilson was a prominent lawyer in that section of the State, but being a scholarly man was chosen president of the West Virginia University. He was administering the affairs of that institution in a highly creditable manner when there was a split in the Democratic Congressional Convention for the Second District in the year 1884. Hon. John Blair Hoge, of Martinsburg, had been the representative in Congress from that district, and was re-nominated. In the Convention, however, which nominated him, there was a very bitter contest between himself and the Hon. Daniel B. Lucas for the nomination resulting in the withdrawal of Mr. Lucas's friends from the Convention and the nomination of Mr. Lucas by a separate convention which they formed. Both Hoge and Lucas went upon the stump, and the Republicans nominated Hon. John W. Mason, of Taylor County, for Congress. The district was strongly Democratic at that time. Seeing that the division in the Democratic ranks would necessarily result in the election of Mr. Mason, both Hoge and Lucas were induced to withdraw. Another convention was called and William L. Wilson was nominated a very short time before the election. The result of the split in the Democratic ranks reduced the vote of that party to such an extent that Mr. Wilson received a majority of only 10 votes over Mr. Mason. His career in Congress afterwards was very brilliant and notable. It was during Mr. Cleveland's administra-

tion. He was made chairman of the Ways and Means Committee of the House of Representatives and formed what is known as the Wilson Tariff Bill, one of the main features of which was an income tax, which, however, was afterwards declared unconstitutional by the Supreme Court of the United States by a divided vote. Mr. Wilson, together with Mr. Cleveland and many other Democrats, was in favor of the gold standard rather than the free coinage of silver advocated by Mr. Bryan, and this position of his resulted in his subsequent defeat for Congress; but upon Mr. Clevenland's being elected a second time President, he appointed Mr. Wilson Postmaster General, and he administered the affairs of that office with great efficiency. At the close of his term he was elected president of Washington and Lee University of Virginia. That institution was built up very considerably during his administration. His health finally failed and he died whilst occupying the position of President of that University, greatly beloved and honored by the people of this State as well as the Nation at large.

One of the most important positions under the Federal Government since the war has been that of Commissioner of Internal Revenue, which is second only to a Cabinet position. This position was filled during one term by the Hon. John W. Mason formerly of Taylor County, and now of Fairmont, in Marion County. Mr. Mason was afterwards elected Judge of the Circuit in which he lives, and has been recognized as one of the ablest and fairest of the Circuit Judges of the State.

Hon. Joseph S. Miller, of Wayne County, was Commissioner of Internal Revenue under Mr. Cleveland, he having been Auditor of the State of West Virginia during the administration of Governor Mathews and Governor Jackson.

Another very influential man both in State and National politics was Hon. Stephen B. Elkins. Mr. Elkins was the delegate in Congress from New Mexico. He afterwards married a daughter of Hon. Henry G. Davis and became interested in the development of the State of West Virginia along with his father-in-law and other gentlemen. He was elected to the United States Senate by the legislature of 1900, and was re-elected in 1904. He died during his term of office. Senator Elkins was recognized as an able and astute leader of the Republican party in West Virginia for many years. He took a very prominent position in the United States Senate, and was chairman of the Committee on Interstate Commerce of that body, which had a great deal to do with formulating and passing the very important legislation of the National Government upon the question of Interstate Commerce, the creation and enlargement of the powers of the Interstate Commerce Commission, the regulation of railroad tariffs and practices as well as those of other common carriers; one of the acts of Congress upon this subject being known as the Elkins Act.

Another prominent National figure was Hon. John E. Kenna, who was elected to Congress from the Third Congressional District, his home being in Kanawha County, for several terms, and finally elected to the United States Senate. He was re-elected and, like Senator Elkins, died during his term of office. Senator Kenna was a very brilliant and able man. He took such a prominent position both in the Houre of Representatives and in the Senate that the legislature of West Virginia after his

death accorded him the high honor of having his statue placed in the Statuary Hall in the Capitol at Washington, along with that of Francis H. Pierpont, who had been Governor under the restored government of Virginia, as has been shown in this history.

In conclusion, it is proper to say that this State has grown rapidly in population and wealth. Her people have advanced in material prosperity and educational advantages, and the men who have held offices of trust and profit have generally been able upright, patriotic men, and the Government of the State has been administered without serious scandal or misfortune, and as the State continues to grow, as it undoubtedly will, it is to be hoped that her citizens will become more and more attached to her welfare and devote their energies to the maintenance of a stable, honest and efficient State government.

Legislative History of West Virginia

By Judge George W. Atkinson (formerly Governor).*

The first Legislature of West Virginia assembled in the Linsly Institute Building at Wheeling, at high noon, June 20th 1863. There were nine senatorial districts under the constitution of 1863 - 1872 each district being represented by two senators. There were then forty-eight counties in the state represented by forty-seven members. Under the first constitution the Legislature met annually and a senator was elected for a term of two years while a delegate only served for one year. Under the present constitution the legislature meets biennially and a senator's term is four years and a delegate serves for two years. Since 1863 Berkeley and Jefferson counties have been added and also five others, viz: Mineral, Lincoln, Grant, Summers and Mingo, making a total of fifty-five counties, with eighty-six representatives. The senatorial districts have been increased to fifteen with a senatorial representation of thirty.

In the early days of the state legislatures the subject of legislation were few. There being practically no public institutions and but little material development, a session of the legislature attracted comparatively little attention. It has been but half a century since the first West Virginia Legislature was convened, but in that brief period the state has progressed from a sparsely settled semi-wilderness to a position where its natural resources are attracting the attention of the business men of the world. This rapid progress has brought with it vastly increased needs of legislation and its great prospects hold upon our legislative proceedings the keen attention of the investor who notes with sharp discrimination our lawmaker's tendencies towards judicious enactments or their silly chasings after modern fallacies.

*On account of official duties, I could not devote the necessary time to gather the data for the preparation of this article, and secured the services of my son—Major Howard Atkinson—who is mainly entitled to whatever credit is due for its preparation.

But little more than the routine could be attempted in legislation until the session of 1866. From the date of the state's admission into the Union up to the close of the Civil War, the laws of the commonwealth could only be enforced in a few districts. Our legislators awaited the outcome of this great strife without attempting any general legislation of a broad character.

When the state was admitted into the Union, we had a population of about 300,000 white citizens. This was a greater citizenship than any other state possessed upon its admission up to that time. It was greater than many of the states then in the Union.

During the several sessions of the legislature, before the Civil War terminated, our law makers were diligent in their efforts to restore harmony among the people and to bring order out of chaos. The entire foundation of the new state government had to be laid. During the period prior to 1866 a great many sections of the state were not represented in the legislature, and because of this fact, a hesitancy was shown relative to enactment of material laws. But few of us, today, can appreciate the tact and foresight required of our legislators in those days of turmoil and uncertainty. They were given a new state, a veritable battlefield, with a bitter and divided citizenship, yet history records that out of this condition they blazed a trail that led to a future security and prosperity that is now the heritage of a united citizenship. They enacted an election law to meet the conditions of the day; they organized the courts and township governments, specifying the methods of administration; passed legislation affecting land titles; provided for a free school system, as required by the constitution; created normal schools and a state university for the higher education of the people; established public eleemosynary institutions for the defectives and helpless; initiated tax laws; passed acts punishing disloyalty, and such other laws as were peculiarly the requirements of the times. These were arduous days which those in control believed required vigorous means, and it is believed by many now that they ploughed too deeply.

When the legislature of 1866 convened, a permanent civil organization had been accomplished, except in four or five counties. Then followed the "Test Oath" law of 1863, which was intended to prevent those citizens who had participated in the Rebellion from voting or holding office, and from participating in any manner in the management of state affairs. This law necessarily aroused vigorous opposition, and while much of the legislative history of the state is involved during this unfortunate period, I deem it proper to pass on with only a mere reference to it. I will add, however, that the adoption of what was then known as "The Flick Amendment" to the constitution abrogated restrictive legislation affecting those of our people who saw fit to participate in the Rebellion aginst the government of the United States, and thereafter permanent peace reigned supremely.

The subjects of legislation in 1866 were varied, covering taxes, obstruction of justice, land deed laws, laws affecting ex-soldiers, incorporations for rivers and road improvements, immigration and the development of agriculture. The sentiment of the legislatures of 1866

and 1867 towards the development of corporations was exceedingly liberal. They had begun to appreciate the natural resources of the state and sought, by friendly legislation, to induce foreign capital to invest within its borders.

In 1867 the juggling of the state capitol location began in the legislature. No permanent location for the seat of the state government had been selected, and a contest between Charleston and Wheeling had begun to gain headway. The governor urged the selection of a permanent site for the capitol but the legislature ignored it. A state with no permanent seat of government was not a most attractive argument to bring investors into our midst.

The legislature of 1867 ratified the 14th amendment to the constitution of the United States, and at this session the long drawn out Maryland-Virginia, (West Virginia) division line question arose, but was only determined finally in 1912 in West Virginia's favor. There was still existing a difference of sentiment throughout the state, relative to the questions which led to the Civil War, as was shown by the debates when the legislature of 1868 adopted a resolution condemning the United States senators from this state for voting to acquit President Andrew Johnson from the charges of impeachment then pending against him. The legislature of this year passed many acts of adjustment and continued its session under the two-thirds rule provided by the constitution. This period from June to December, 1868, was almost entirely taken up in codifying the laws and creating a code for the state.

During the legislative session of 1869, the Virginia Debt, which had been previously debated, again arose, but a consideration of the question was postponed, because of the pending suit of the state of Virginia to recover from West Virginia the counties of Jefferson and Berkeley. It was then claimed that no intelligent conclusion could be reached until the question of sovereignty over these two counties had been determined by the supreme court of the United States. There was an apparent disposition in those days to reach an equitable basis of settlement. It was this continuity of spirit that caused the acknowledgment to be placed in our fundamental law that West Virginia, as a new state, should pay her just proportion of the Virginia debt at the time the mother state was divided and West Virginia was created as one of the states of the Republic.

This legislature took the first step toward appropriating proper funds for buildings to house our public institutions. The demands, however, were greater than the means at hand, but a good beginning was made by the construction of the penitentiary and a hospital for the insane. The public school system was vigorously pushed and new schools and school houses were created. What was then called the Agricultural College at Morgantown, was changed to the West Virginia University. This was the birth of our present great State University. This legislature expressed an interest in bringing into the state a desirable class of immigrants, but forgot to appropriate a salary for the immigration commissioner, and neglected even to allow for his actual expenses.

Again the capital location became a cause for bitter contention. Strange as it may seem, a goodly number of the legislators treated the subject as a matter of small importance. They, however, were alive to the transportation question and urged the improvement of the turnpikes and rivers of the state and were very liberal towards new railroads. They asserted ownership over the navigable rivers and leased the streams to improvement companies, fixing the rate of tolls by legislation. At this early date, these men saw the necessity of legislative control of large corporations as shown by the debates over the area of land a corporation should be allowed to hold, asserting that 10,000 acres were amply sufficient for a blast furnace company, 3,000 for any coal company, and for a manufacturing company, 1,000 acres was an abundance. No corporation was to be allowed more than 5 acres in any incorporated town, except agricultural societies, which were limited to 30 acres. The spirit of our present tax system is found clearly defined in a bill then proposed to compel the listing by officials of railroads of all property at actual money value for taxation purposes.

As the state continued to grow and prosper, the attention of the legislature of 1870 was more closely drawn to the needs of transportation. Surrounded, as we were by great and prosperous states, whose railroads crossed our territory, we, therefore, could not longer remain indifferent. Over our mountains and along our streams lay the most direct routes from the east to the west. We needed but to declare our friendly attitude by rational legislation in order that our resources might be opened to waiting markets. This friendly spirit was apparent in our legislative expressions, and the expansion of our internal railways systems took on new life and vigor. This legislature realized our natural wealth and advertised it. Since the organization of the state, our coal production has increased in some sections 700%; the manufacture of salt within our borders increased in six years over 500,000 bushels; our lumber production increased 300%; the iron industry in the Wheeling district advanced over 300% from 1863 to 1869; a new nail industry had sprung up in this district that was to become famous throughout the land, and our white population had increased, since the state's formation, about 85,000.

The war had made "new modes of thought and new courses of policy" necessary and easy and the legislatures were not slow to appreciate the opportunities thus afforded. By a common consent immigration was now considered indispensable to the state's advancement, and it was felt that the time had now come to give stability to legislation. A great many of our public buildings had been finished and paid for, costing over $1,000,000, and for school property another $1,000,000 had been spent, and in the meantime the state had paid all curent expenses and had met all liabilities.

At the close of this period a demand was again made by Virginia for the settlement of "The Virginia Debt." The officials of that state threatened to sue West Virginia in the United States supreme court. In 1870 three commissioners from Virginia arrived at our capital and

our legislature appointed a joint committee to confer with them, and authorized the governor to select three commissioners to represent this state in conference with the three Virginia commissioners, but made no provision for gathering the facts and figures upon which a settlement could be based. This failure to provide for the carrying out of the conference caused it to be abandoned, and to this action may be traced the first step towards the spirit of "repudiation" that afterwards became so deeply rooted in the minds of our people.

It was in this year (1870) that the negroes of West Virginia cast their first vote under the XVth amendment to the national constitution. Many of them voted, and throughout the state there was no apparent inclination to object to this new body of electors. In a few years the rights of the majority had been accepted by the minority, fresh from war, and the spirit of our government had predominated over great bitterness, and men realized that the nation had a long life before it. The first period of our existence as a state offered many problems of government to be met, and to be again as quickly dropped, to meet the varying conditions of the times; but now had come a new period, an epoch in our history and it was realized that no longer could we prosper under a fundamental law that restricted the civil rights of a class of our citizens, consequently the legislature of 1870, as I have formerly stated, proposed a constitutional amendment removing political disqualifications, a constitutional convention was ordered, and in 1872 a new state constitution was created and adopted, and in this manner the reconstruction period ended and a government under vitally changed principles was launched upon a stable and equitable basis and has prospered and grown great as a member of the American Republic.

The constitutional convention convened in Charleston in January, 1872, and concluded its labors in April of the same year. A complete modification of the old fundamental laws was made and the state entered upon its first period of truly representative government. The November, 1872, session of the legislature was confronted with the work of adjusting the laws to the new constitution, which had been duly ratified by the people. It was required to thoroughly and completely reorganize the county governments, as the new constitution had swept away practically all the old laws pertaining to the management of county and municipal affairs. The establishing of the county court system required a revision of nearly all the laws relating to the matters of probate, appointment of guardians, committees, settlements of accounts, recording of deeds and also the laws relating to holding elections. The new constitution went into effect January 1st, 1873, and the constitutional convention had called the legislature together in extraordinary session in November, 1872, to enact legislation in conformity with its requirements.

At this early date in our history the road laws came prominently to the front, because of existing imperfections. Labor on public roads was compulsory; the supervisor would not drive his neighbor, and when prosecuted for neglect his neighbor on the jury would not vote for his conviction. It proved to be a sad sort of a system, with no apparent

remedy. Another matter of great interest to the people was the forfeiture clause of the new constitution. There existed lax provisions in the laws to protect owners of property. Only the sheriff's receipt stood between the owner and delinquency. When forfeited, no redress could be had by special or general legislation. Vigorous efforts at adjusting the laws to the new condition of affairs, were made by the succeeding legislature, and system was rapidly superseding chaos. During this period, beginning with the constitution of 1872, there was developing an inclination to go more closely into the affairs of transportation companies, which resulted in a law fixing transportation rates for the various railroads of the state; and it must be admitted that the requirements of the laws were both equitable and just, although but very little good resulted therefrom.

Again the Virginia debt question arose. This time our commissioners went to Richmond, but the governor of Virginia refused to appoint commissioners to meet with them, declaring it not within his power so to do. However, our representatives proceeded to ascertain "upon fair, just and equitable principles * * * " what amount, if any, we should pay Virginia. They adopted as "the principal, if not the only basis of adjustment of the debt, 'the benefits conferred' on the two states by the proceeds of the bonds * * * and 'not territory and population,'" and determined the balance due to Virginia to be $953,360.33.

The wrongs born of political party perpetuity were beginning to become apparent. The period from the sitting of the legislature of 1881 for the next decade can truly be called our industrial awakening. It was said by a statesman of this period that "upon the character of our laws and the fidelity and impartiality in which they were executed, depends largely the welfare of the state." It was appreciated that it was necessary to reorganize the opportunities which were around us and to "realize fully that institutions under which some of us were reared and which have left an undying impression or character,—which influenced not only our habits of living, but also our opinions and habits of thought,—are now of the past and no longer factors of existing social or political problems * * * ."

Our economical advancement quickly outdistanced our legislative enactments, making possible commercial wrongs that grew rapidly because unrestrained by law. The panic of 1873 had about disappeared and prosperity was swinging to the front, and men treated law-making with indifference when commercial gain was in sight The inequality of taxes, however, led to much discussion in the legislature, but to no avail. Our criminal charges had grown out of proportion to the business transacted by the courts, and charges of fraud were made that led to the suggestion of requiring specific returns to be made to the auditor of the state. Appropriations were made for additional buildings for the insane. The great need for a geological survey was presented to the legislature in order that our resources might be placed before the world. The population of the state had increased during the decade, from 1870 to 1880, in a ratio greater than any other state east of the Mississippi river, with the exception of two.

The legislature of 1881 created a committee to revise the state laws. This legislature extended its session by joint resolution, and met in January, 1882, to consider the report of its revision committee, which sat during the recess. A new phase of the "old sentiment" of our law-makers became apparent when the creation of the position of president of the West Virginia University was proposed and bitterly opposed. This same element was still opposed to the creation of a law school and a medical school at the university. The 1881 session created a state board of health to regulate the practice of medicine and surgery. and requiring practicing physicians to register, but provided no funds for the regulation of the public health. They also passed a law regulating the practice of pharmacy, but failed to provide funds for this purpose. A conference was held with a "West Virginia Committee" of London, England, who represented holders of West Virginia certificates in Europe. Their proposition was considered, but the sentiment of the senate committee of December, '73, was re-affirmed that "West Virginia owes no debt, has no bonds for sale, and asks no credit."

The legislature of 1883 was confronted with a strange proposition. Capital had been pouring in to develop the resources of the state; railroads were being built through the interior mineral producing counties; new farms were being opened up; mining outputs were greatly increased; the lumber industry had made hitherto valueless lands valuable, and the population had increased, during the past census period, 40%, yet the assessed valuation of personal property in 1871 was greater than that of 1881 by $3,000,000. The total net gain in real and personal property only showed an increase of 5% for this period of ten years. This aroused a tremendous protest against the method of assessing our taxable property and showed the necessity for new laws on taxation. The legislature did nothing, however, and the old spirit of class favoritism prevailed and dereliction of revenue officials continued. The callousness of long tenure had become too deeply rooted to be thrown off. Nothing short of reversal would avail. Gross land frauds were being perpetuated. Many large bodies of land were offered for sale in eastern cities for ten cents an acre. The deeds. plats, abstracts, seals, etc., for West Virginia lands were being manufactured in New York City. It was urged that laws be passed prohibiting clerks of courts from certifying titles to forfeited and delinquent lands or giving abstracts of such titles to lands, and that the legislature should investigate, by commissioners, the large tracts of land held under grant from Virginia, determine if they exist and settle the titles, etc., in order to protect legitimate investors. This, however, was not done. Pennsylvania had passed laws driving from her borders the class of life insurance companies known as "grave-yard" and "death rattle" companies, and our legislature was appealed to, urging enactments that would prevent them from coming to this state. Our immigration bureau had been closed since 1879, owing to failure of the legislature to appropriate funds for its support.

No better illustration of the failure of some of our legislators to ap-

preciate the changes in sentiment and conditions throughout the state can be presented than a resolution offered in the state senate of 1885 which proposed an amendment to the constitution that contained the same exemptions from taxation that had been provided by the statutes of former years, but which were now admitted to be clearly unconstitutional. The amendment relating to farm products, salt wells, etc., as herein before stated, had for a bait the further exemption of household and kitchen furniture to the amount of $50. In the case of the Auditor vs. Chesapeake & Ohio railroad the exemptions heretofore made by the legislature were declared to be unconstitutional by the supreme court of the state; but the legislature of 1883 defeated a proposed law to make this decision effective. This left these unconstitutional laws on the statute books. The governor directed that assessors disregard the illegal exemptions. Many of the assessors refused to obey the order, and a mandamus proceeding was instituted in the supreme court of appeals against the assessor of Brooke county for his refusal to comply therewith, and a peremptory writ of mandamus was issued requiring compliance with the requirements of the constitution. Discussion among the people and the general condemnation of the alleged legalized favoritism shown to classes, served to bring out a large amount of concealed property for taxation, which theretofore had never paid its proper share of taxes. The assessed valuation of real and personal property thereafter increased over twenty million dollars from 1882 to 1883. Such favoritism was appalling, yet in the face of these disclosures, there were members of the legislature of 1885 who proposed to continue such conditions by an amendment to the constitution.

The results of the aroused sentiment against class legislation, made manifest during the session of 1885, found echo in a similar awakening that greeted the legislature of 1887. The railroads of the state, grown lusty under lax legislative restrictions, were using their franchise privileges to favor or to destroy the shipping classes. For years these public carriers from alleged ulterior motives, had withheld the material development of the state. Freight rates to our natural markets were from 25% to 50% higher to the West Virginia shippers than those from far western states. "Our geographical position should make us a wealthy community but progress had been stifled by exorbitant freight rates and discrimination." The policy of trunk lines to restrict the building of lateral branches into the wealthy mineral and lumber sections was made possible by applying the "modern rule of cunning cupidity," the fixing of rates at "what the traffic will bear."

The new national interstate commerce act was plead in defense of the legislature's failure to act. It was cited that the supreme court of the United States had decided that the states had power to regulate charges within their boundaries, but they could not regulate such charges from within to without. Things looked cheerless to our people at that time, because our citizens sold nearly everything they produced outside of the state. The issuing of free passes was denounced as an indirect method of corrupting political morals. To the careful political observer, it was apparent that the era of political reform had begun to dawn,

and while our legislative body had not fully awakened to this truth, the seed of a sentiment had been sown that would prove a political avalanche, whose force would carry us even to the verge of organic disruption; and all this can be easily traced to the lassitude and subserviency of state legislatures throughout the nation.

The constitution of 1872 contained no provision for a lieutenant governor, to which I shall refer further on. This has led to many bitter political fights in the state senates, always to the embarrassment of the public's business and to an aftermath of ill will that further jeopardized the success of legislative sessions. In the legislature of 1889 there was a contest over the selection of a president of the senate that deadlocked the organization of that body for thirteen days. Had there been a lieutenant governor, that official, by virtue of his office, would be the president of the senate, and at the initial meeting of that body an immediate organization could be effected.

The theory of our government was being undermined by election frauds and the corrupting influences of money. Influenced by other conditions, pertinent to their time, the constitutional convention of 1872 provided that no citizen should ever be denied the right to vote because he had not been registered. It prohibited the legislature from ever authorizing any registration board of any character. Under the previous constitution a registration of voters was required. Under the new system gross wrongs were perpetrated and election crimes consummated. The new law struck at the distress and brought forth a worse condition. It practically meant no restriction as to who should vote in districts which were under control of the political corruptionists. Public sentiment, being quickened by the palpableness of the wrongs about them, demanded the constitutional amendment of 1901, which again authorized a registration of those justly entitled to the elective franchise.

The demand for reforms became so insistent and so impressive, and this sentiment was shared to such an extent by many of our public officials, that legislative action upon such subjects were demanded at a special session of the legislature in 1890. The legislature was asked to pass laws fixing maximum rates on railroads in the state; to correct abuses; to enact "no pass" laws; to fix liability for wrongful acts; to limit railroad labor; to restrict real estate to be owned by corporations in the state; to pass a corrupt practice act and to regulate nominations and elections; to punish frauds at elections; to secure the registration of legal voters; to enact anti-trust laws; to prevent fraudulent entry of lands on land books; to purify the jury system; to revise text-book laws, and regulate many other undesirable conditions then existing. This in reality was the development of a new era in the life and thought of our West Virginia people, and good results would necessarily follow so general an awakening. But it required time, apparently all too long, to accomplish the desired results. For a considerable period most of these demands fell upon apparently deaf ears. Wrongs unrighted and unheeded are most often the forerunners of upheavals. A reform withheld, quickly breeds demands for others; ignored, they accumulate, and history

teaches that the hour will come when the whole will be precipitated, allowing no time for calm consideration or elimination. So it was with our affairs in West Virginia. Good men in our legislatures wanted to act, but the accumulation had become so great through evasion, if evasion, if naught else, that the legislatures could only wait for the fulfillment of the "handwriting on the wall."

In the election of 1906 a new set of state officers with different political views were chosen by the people. Thus a new era was entered upon with a new political and economic sentiment in control. The opportunities were great, the necessities many. In January, 1897, the legislature convened charged with the enactment into laws of the expressed sentiments of the people. The task was a mighty one and the work of a single session could be but a beginning. The governor of the state, although of a different political party from that of the majority membership of the legislature, was, like several of his predecessors, alive to the necessities of the times. He urged that the state board of health should have control of the examination of physicians desiring to practice medicine in the state. Attention was called to the continued increase in criminal charges. State banks should be required to keep on hand 15% of deposits. A law school at the University had been established and was a great success. Compulsory education was urged. There was at that time a school population of 296,000 and a daily average attendance of only 141,000. The school text-book law was found to be faulty, the system of state control was opposed and a county system urged. The militia was being reorganized after years of delay. The task of copying the Virginia land grant books had been finished, which work had long been demanded. The records were in Richmond and heretofore examinations of these books had to be made in Richmond, which was a great inconvenience. Road legislation was urged. In only five counties were there any sort of good roads. The road system was a farce. They were still operated under the general road law—the alternative system of 1872-3, and 1881 and 1891—and in some counties all four of the systems were used. Adoption of some permanent character of roads under one controlling body was presented as desirable. Investigation of insurance companies that desired to enter the state was necessary. Many of these recommendations were carried out by the legislature.

The war with Spain clearly showed the results of the neglect of our militia. When troops were called for by the national government the governor found he had no money to rendezvous the state troops, no appropriation having been made for such purpose in time of war. The governor was forced to borrow the money. Since that period, however, the militia has had more consideration at the hands of the legislature. Active steps were begun at this session (1899) of the legislature to bring our laws up to a status demanded by the spirit of the times, and some headway was achieved.

All the state boards were reorganized and politics eliminated from the state's public institutions as far as possible. The attendance at the University increased from 465 in 1897 to 885 in 1898, showing a growth

in one year of nearly 100%. The standard was set high and the school was being thoroughly equipped for educational purposes through liberal appropriations by the legislature. The recommendation of the governor that we provide a real normal institute with a curriculum which will enable us as a state, to teach teachers how to teach was carried out. Two such schools for the teaching of teachers have been organized among our normal schools. More appropriations for the Deaf Dumb and Blind school were asked for to provide room for these students and a separation of the classes was urged. Nothing could be more incongruous than the teaching in the same room those who cannot see and those who cannot hear. The Boys' Reform School was prospering and the legislature of 1897 created an industrial school for girls. Our insane hospitals were constantly being increased in size and were well managed. These institutions were unjustly burdened with a class of unfortunates that the law should require the counties to care for or be assigned to other institutions created solely for the purpose of caring for idiots, paupers, and incurables. This necessity was partially met by the creation of a home for incurables by the legislature of 1897. The law granting the state board of health jurisdiction over practicing physicians, passed in 1897, had done much to elevate this profession by weeding out the "mountebanks" from among the reputable and educated physicians and surgeons. The state board of agriculture, organized in 1891, had introduced new ideas among our farmers. They had begun the publication of a magazine and inaugurated the farmers' institute, with an organization in each county. The legislature passed a law to prevent the spread of contagious diseases among stock and it was being successfully enforced. In 1898 about one-half of the state's population was engaged in some phase of husbandry.

The spirit of consideration of public needs was becoming more general in the legislature. During the session of 1899 there was appropriated for public purposes one-half million dollars more than in any preceding session. Conditions under which labor was employed had been given scant consideration heretofore. We had a labor bureau, but in-effectual laws to support it. No controlling enactments existed in 1901 to make effective factory regulations. Safety appliances and hygienic regulations in workshops and factories were generally ignored. There were no laws requiring seats for female employes and no dressing rooms and toilets provided for their exclusive use. Child labor increased 10% in West Virginia during the period of 1899-1900 notwithstanding there was a law requiring children to attend school until the age of fourteen. This statute was violated every day, and children could be found at work in the industrial plants throughout the state. This was generally the parents' fault, but it was urged that it be made unlawful to employ a child under the age fixed by statute. Attention was called to the necessity of a pure food law, but nothing was done. Our state banks were increasing in number and strength and a law providing for more careful supervision was urged. A law had been passed in 1897 to regulate stationary engine practice, but it had proven ineffective and a state board of examiners to

license this class of labor was urged. A factory inspector was also asked for.

The legislature of 1899 passed a law making eight hours the legal working day on all public works of the state. The governor urged before the legislature of 1901 a law making eight hours a standard working day within the state. He was ahead of the times; but blind, indeed, is the man who cannot foresee the coming of the day when a toiler will not be required to go to his work before daylight and labor after dark that he may merely eke out a meagre support for himself and those dependent upon him. Arbitration was proposed and the important question of the prohibition of the importation of strike breakers into the state was discussed. Truly this great question was then and is now a serious one for West Virginia, independent of party or creed, or class, to thoughtfully consider.

For many years the state had been in need of an official geographical survey, and finally a commission for that purpose was created by the legislature of 1897, and work thereon was immediately begun. True meridians of the several counties were found, preliminary maps of the coal formations were made, oil and gas sections were officially shown and a volume on oil production was issued, followed later on by other volumes on other important subjects. All work was very soon stopped, however, and the survey was practically paralyzed by the failure of the legislature of 1899 to make an appropriation to keep going the splendid work it had started out to accomplish. It was then as now apparent that our natural resources should be officially advertised, and the demand for the continuation of the survey was general among all of the intelligent classes of our citizens. Our mining industry had grown to large proportions but our mine inspection laws were woefully inadequate. A bill revising these laws had been offered and defeated in the senate at the session of 1899. We had advanced from sixth place in 1870 to fifth place in 1880 in the list of coal mining states in the republic; to fourth in 1890, and in 1896 we were third. Still, with this immense growth, we had but few laws governing the methods of mining. A beginning had been made, a demand for regulating laws existed, proper enactments were sure to follow, and they did. The legislature of 1899 made appropriations for three miners' hospitals, wherein injured miners could be quickly taken and properly treated. These hospitals have proved themselves to be a great boon to the men engaged in the hazardous work underground.

West Virginia, owing to the peculiar surroundings of its admission to the Union and the uncertainty of the times that were to follow, entered upon its existence with no written records of its past, and with no research organization to gather necessary data, with no archives in which to place such records, when they were secured or presented by private citizens. The state impassively ignored these necessities, so essential to posterity, and no material effort was made by any legislature to provide for this deficiency, consequently a body of private citizens organized themselves under the incorporated title of "The West Virginia

Historical and Antiquarian Society." After many years of waiting for the state to act, the society proceeded to collect such valuable records and data as came within its reach. The legislature gave this society but little aid, still its members were diligent and successful in a way. Under an agreement this society vested in the state all its rights and titles to all of its books, general collections and whatever it had, and awaited the action of the law-makers relative to taking control of this work in the name of the state. This was finally done, and the Department of Archives and History is now the admiration and pride of all our citizens. To the late Virgil A. Lewis the most of this honor belongs.

This session of the legislature submitted to the people five proposed amendments to the constitution for ratification and all of them were approved. The first was to make the office of the secretary of state elective; the second to fix the salaries of governor, secretary of state, state superintendent of free schools, treasurer, auditor and attorney general, and provided that all fees of these offices should go into the state treasury; 3rd, to increase the number of judges of the supreme court of appeals from four to five; 4th, to limit the accumulation of the permanent and invested school fund to one million dollars, all excesses to go to the general school fund, and 5th, to authorize the registration of voters.

These were all desirable amendments. The secretary of state, I have always believed, should be elective. The salaries heretofore paid some of the state officials were ridiculously large, and the turning into the state treasury of the fees hitherto paid to officials meant a saving of many thousands of dollars annually to the state. The increase in the number of judges of the supreme court was an absolute necessity. The limiting of the irreducible school fund had been recognized as most desirable for years. The perpetuating of the fund meant that our children were to be deprived of school privileges for the benefit of future generations. The registration of voters meant a reversal of the policy of the state for the past thirty years and a return to the conditions existing under the constitution of 1863. The approval of all these proposed amendments showed that the people wer quick to support any and all reforms.

When the legislature of 1903 assembled, it was confronted with the necessity of carrying these amendments into effect by the enactment of proper laws. The question of a general revision of our tax laws was presented to this legislature through the report of the tax commission which had been authorized by the preceding legislature. This commission reported the need of an entirely new tax system. No definite action, however, was taken at this session and the legislature was called in extra session to consider the bills proposed by the tax commission authorized by the legislature of 1901, relative to assessments, collections and disbursements of taxes and other revenues. A committee was appointed to go over the report and recommendations of the tax commission formerly created and to formulate some measure that

would give the people relief from direct taxation levied upon their property for state purposes. The administrative and economic reforms in the proposed bills, it was believed and proved to be true, would effect great savings and reforms in the county and state governments.

When these new tax bills were completed and presented to the legislature for enactment, the sentiment in their favor was irresistible, and consequently their enactment into permanent laws speedily followed. Thus after years of injustice, inequalities, favoritism in taxation and collection, the great mass of the people came into their own, the right to fair and honest representation, and West Virginia crossed the border into the realm of the people's rule.

Under the new tax system the assesment of corporation property marked a new era in taxation in the state. The amount of taxes under the new law for 1906 was $882,544,611, and at the same time this law did not impede development or disturb business. The state levy was reduced from thirty-five cents to eight and a half cents. The law also stopped the extravagant creation of debts by local governing bodies. In 1906 the assessed valuation of railroad properties in the state was $177,425,980.68. The last previous assessment under the old plan was $36,000,000. The demand for just taxation had won. The department of Archives and History had also been created, following a policy to meet promptly all demands for rejuvenation. The state now has, as I have previously stated a department that will fill the deficiencies existing in her records and history.

The legislature of 1908 submitted two amendments of the constitution to the people, and both failed of ratification. One was intended to increase the compensation of members of the county courts, and the other to grant the right to women to hold appointive offices. This legislature also cured certain defects in the new tax laws. Under these modern laws the assessed valuation of property continued to increase. A law was proposed in the legislature of 1909, giving the governor the right to remove subordinate officials for neglect of duty. This question had become a serious one. No control over these officers could be had except by impeachment for gross misconduct. The laws were not being enforced by county officials and had fallen into disrepute through want of proper enforcement. Some direct control over these officials is absolutely necessary. The constitution requires the governor to see that all of the laws of the state are properly enforced, and yet no statute has ever been enacted by the legislature to make this constitutional provision effective.

The law of 1908 requiring county officials to pay into the state treasury certain of the fees was proving its worth. During the first year of its existence there was $48,321 refunded. The sentiment was still growing in favor of placing all county officials on a salary and securing to the state all fees. The Bureau of Accounting statute went into effect in 1909, and the same year the State Board of Control was organized. Both of these new departments have proved themselves to be great successes and have saved many thousands of dollars to the state. The State Board of Regents was another new organization which has con-

trol and supervision of all the state's educational institutions, which relieved a very undesirable condition that had theretofore existed. The auditor as ex-officio insurance commissioner, had supervision over insurance companies doing business within the state, and this new arrangement had done much to rectify the wrongs hitherto existing in this branch of business.

Our state bank laws had been bettered by amendments from session to session, and this department had also proven its efficiency. Many new laws were still necessary to bring our standards up to those of other states, and the prospects of early enactments by the Legislature were encouraging. A marvelous record is expressed in the statement of our state bank examiner wherein he says that "it is a matter of State pride that no depositor in any of the banks of our State has ever lost a dollar since the formation of the State."

The road laws enacted by the legislature of 1909 marked a beginning of sane road legislation, and though faulty, were a step in the right direction. A movement to work convicts on public roads is rapidly gaining headway. We had in 1909 31,633 miles of public roads in the State, and the levy for them in 1910 was $900,000. The public roads question is one of the leading and most important issues of today.

The income tax amendment to the constitution of the United States was submitted to the legislature of 1911 by Congress for ratification, but was defeated. However, it was finally ratified by the legislature of 1913.

A Municipal Code Commission was authorized by a previous legislature, but no action was taken upon the report of the commission. A primary law had long been urged, but the legislature of 1911, after much discussion, failed to agree upon the bill offered. Our Department of Labor was still neglected and the legislature of 1909 had failed to make an appropriation for it, necessitating the borrowing of money by the Board of Public Works to continue this bureau. An employer's liability law was urged and the sentiment for it was so vigorous as to foretell its early enactment. A new game law was passed, taking the place of that prostrated by the former decision of the Supreme Court of Appeals. Anti-lobby sentiment had become strong and a demand for a tax on natural gas had become general. From 80% to 90% of the profits derived from the production of oil and gas go out of the State. The preparation of such a bill would necessarily be tedious, because of the restrictions of the National Constitution. Some laws on gas conservation had been enacted, such as the act of 1897, requiring the plugging up of abandoned wells. It is estimated that the State had lost $150,000,000 in the decade preceding the year 1907, through the criminal waste of is natural gas. It is contended that now there is 500,000,000 cubic feet of gas escaping into the air daily, which of course is total waste.

Our elections are still the scenes of fraud and corruption, although a step had been taken to remedy these grevious wrongs by the passage of a Corrupt Practice Act. Our constiutional provision for the voting of an open ballot is one of the causes of a continuance of this state of affairs. By this means the venal seller of his vote can prove he delivered it

as contracted for. The Australian ballot was a good enactment, but a shorter ballot is certainly desirable.

Railroads have voluntarily abolished free passes and our constitutional right to regulate railroad freight and passenger rates has been put into law by the enactment of a two cent per mile passenger rate throughout the State.

Much has been accomplished by the recent legislatures in enactments into laws of the reforms demanded by a complete reversal of the sentiment that existed among our law makers of earlier years. Criticism should be charitable. Great men have sat in our legislative halls and the impressions of their thought and foresight can be traced distinctly throughout our economic and political existence, and the things they left undone are offset by the greater things they did. The failure to realize is no crime. The wrong lies in shirking one's duties and responsibilities.

The requirements of this article necessarily end with the legislation of 1913. Few law making bodies have ever been confronted with more demands for radical enactment. The sentiment for reform had become so exacting that many voters abandoned the two leading political party organizations and formed a new political association in order, as they hoped, to more readily reach a radical end. An almost total abandonment of old ideas has taken place, and the people are insistent upon a quick enactment of new and remedial legislation. The new State officials and the present members of the legislature accepted office under these terms of agreement with the people, and, be it said to his credit, the governor elected in 1912 has given a whole-hearted and apparently sincere effort to bring about the legislation promised in the political platform his party presented to the people of the State, and upon which he was elected.

The legislature was, however, impeded in its work by a failure on the part of the senate to organize. Distressing as this was, yet it brought about a probable elimination of future conditions of this character through a constitutional amendment which is to be submitted to the people, creating the office of lieutenant governor, who as president of the senate will always make possible the organization of that body.

During my term as governor, I foresaw the necessity for a presiding officer in the senate, who should be chosen by the people and not by its members, and I assigned two reasons for an amendment to the State Constitution to accomplish the objects I had in view: first, for many years, I had contended that the position of a lieutenant governor is sufficient in dignity and character to be chosen by the voters of the entire State and not by the members of the State Senate, because the president of that body, under existing law, becomes governor in case that officer should die, resign or become incapacitated to discharge the duties of the highest office in the State. Consequently, sixteen men (a majority of the senate) should not be delegated with the power to choose a possible governor for a quarter of a million of voters. My second reason was that a tie or "deadlock" might occur, which would prevent the organization of that branch of the Legislature and thus obstruct

public business. It is a strange fact that during each of the last two sessions of the Senate there was a tie—fifteen and fifteen—and it was with great difficulty that an organization of the body was in each instance accomplished. Had we a lieutenant governor neither of these deadlocks would have occurred. The necessity, therefore, for such an officer is so apparent, I feel confident that the proposed constitutional amendment will be practically unanimously adopted by the people.

The demand for a workmen's compensation law was met by an enactment to that end. A public service commission was also created. A law was passed prohibiting the continuance of the old mine-guard system and substituting therefor a new, and it is to be hoped, a successful plan. The prohibition amendment to the constitution, which had been presented to the people for ratification, had carried by a tremendous majority and a stringent law carrying it into effect was passed at the 1913 session. A law placing restrictions around the sale of stocks and bonds was enacted. Laws abolishing the common drinking cup; restricting the sale of cigarettes; prohibiting railroads from owning and controlling competing lines; a collateral tax law; a good roads enactment, *et cetera*; a law controlling and restraining the use of water power in the State was also passed. Another constitutional amendment presented by Congress, relative to the election of United States senators by a direct vote of the people was ratified. Amendments to the State banking laws were made, and a commission to confer with the Virginia authorities relative to the adjudication of the judgment rendered against West Virginia by the Supreme Court of the United States was authorized. Other valuable laws were also passed.

In but little more than a decade the whole character of West Virginia legislation has changed. No longer does any one of our legislators ignore a popular demand; and at the end of fifty years of State existence, we find legislation representative of public sentiment and our legislators eager to meet the demands of the people. West Virginia legislation has never been anticipatory,—it has always been corrective.

In the early history of legislation the term "lobbyist" did not convey the same meaning that it does today. In those days men paid closer attention to the details of public enactment, expressing themselves before members, in committees and in public places. Our citizens were not then so engrossed in commercial pursuits and without time to appear personally when legislative matters which affected the individual citizen or his interests were being considered and enacted. Citizens interested in the public welfare always attended legislative sessions and lent their voices in aid of proper measures and vigorously condemned the undesirable. The engrossment of the more intelligent class of our people in their individual affairs, generally that of money-getting, is the direct cause of the existence of the public lobbyist. This class of men, therefore, are the direct creation of the business men of our country. It is apparent that the same reason that prevented personal attention to law-making would prevent attention to the selection of lawmakers. The result is obvious. Bad men get into the legislatures.

Bad laws necessarily result. The busy man saw the need of proper representation. The shrewd corruptionist sold his services, and to be serviceable he became corrupted. To achieve the desired ends, many, otherwise honest citizens, advanced the money to prevent through the services of one bad man the wrongful and injurious acts of another bad man. Thus was born the legislative lobbyist and the "blackmailer." The one would introduce embarassing measures to compel the other to buy him off and the citizens and corporations "put up" the money. Whilst this was the origin, the system grew to have many other phases. Corporations and citizens saw easy means of passing desirable legislation, in the earlier years, through the lobbyist method. They would send crafty men to the legislative sessions and secure the passage of favorable laws. In those days this was the chief purpose of lobbying. It was comparatively easy because the people did not suspect them. Soon the people began to demand the return of their purloined rights. It was when the demands for remedial legislation became great that the lobbyist had to apply his nefarious practices to hold what, in former years, he had unrighteously secured. They banded themselves together, the lobbyist for all other interests helping the lobbyist who was fighting to hold his wrong gotten gain. They resorted to corruption, bribery, intimidation, to any means in fact, to secure their ends. It is regretable, but nevertheless true, that this description fits the majority of lobbyists. There is another class who can rightfully be termed "representatives," who come to legislatures in behalf of honest interests, who present their arguments and facts to members and committees, seeking by truths alleged to prevent injudicious legislation affecting the interests of those they represent. The presence of such men should be encouraged by law. Their efforts impaired, however, by the unfair association, in the public mind, of the clean man with the corrupt lobbyist.

The "blackmailer" is the most contemptible of all the legislative "hangers on." He will get up a bill that he knows will hurt some proper interests and will, by some means get it introduced, and then demand money from those affected by it to have it withdrawn. Collusion is necessary between the "blackmailer" and some member, or perhaps idiocy might be pleaded by the legislator in his personal defense.

The lobbying practice can never become very general without some tolerance upon the part of a Legislature. It can be effectively killed by simple legislation, and the corrupt lobbyist can never flourish where the morals of the members of a legislative body are of a high order.

I have necessarily left unmentioned many legislative measures of importance, on account of the space allotted for this purpose. In conclusion I must congratulate our West Virginia people upon the wonderful advancement we have made during the fifty years of our history as a State; and I beg to add that, in my humble judgment, it is only the presage of what "The Mountain State" is yet to be.

The Origin and Development of the Judicial System of West Virginia

By Judge John W. Mason, Fairmont, W. Va.

Successful and well organized governments are, as a rule, the developments of less perfect ones. It rarely, if ever, happens that a new government is so perfect in all its parts as not to require amendments. The statesman who imagines that he has given to his country a system of laws which will serve for all time, makes a great mistake. Alterations and additions in governmental supervision over subjects which cannot be anticipated, will go on as long as there are changes in the conditions, habits, and necessities of the public. It is quite likely that the constitution of the United States would not have been adopted by the states, without the assurance that a number of amendments were to follow. The government of the state of West Virginia is no exception to this rule, and the present judiciary system of West Virginia is the development of the ancient courts of Virginia. It is therefore not only interesting to the student but also profitable, if not indeed necessary to trace the history of the courts of old Virginia, in order to properly understand the courts of modern West Virginia.

When a few hardy adventurers landed along the Chesapeake Bay, about the beginning of the seventeenth century, and established settlements in Virginia, the laws required for their control were few and simple. Those settlements were established under the authority of James I., king of Great Britain, granted to a corporation called "The Treasurer and Company of Adventurers and Planters of the city of London for the First Colony of Virginia," usually referred to in history as the "London Company." The authority granted to this Company by the British government is contained in three charters or letters patent, dated respectively, April 10, 1606; May 23, 1609; and March 12, 1611-2, and the accompanying ordinances and instructions, dated November 20, 1606 and March 9, 1607-8. In 1624 King James dissolved the London Company, in Virginia, and took away its charter; and made Virginia a Royal Province.

The form of the colonial government is set forth in detail in these charters and instructions. This corporation was governed by a council of 13 in England, appointed by the Crown. This council had "the superior managing and direction, only of and for all matters that shall or may concern the government as well of the said several colonies as of and for any other point or place," within the limits of the territory granted to the company. There was also another council in the colony; to this council and a Governor or President was committed the administration of the local affairs of the company in Virginia. They were vested with judicial powers and were charged with the duty of enforcing the laws of the colony. They had authority to submit certain disputes

to "a jury of twelve honest and indifferent persons." The jurisdiction given the Governor and Council is very fully stated in the instructions of November 20, 1606.

The government remained in the exclusive control of the Governor and Council, and officers appointed by them, until the year 1619, when Sir George Yeardley, Governor, called a legislative body. This was the first legislative body ever assembled in Virginia. The colony not then being laid off into counties, the representatives were elected by townships or boroughs, from which circumstance the lower house was called "The House of Burgesses," representatives of towns or buroughs. The first assembly met in June, 1619, at Jamestown. Its object was to assist the Governor and Council in reforming and making laws for the colony. The people thereafter elected, annually, delegates to this assembly. It was in fact a mere advisory body as the Governor and Council had the power of revision and absolute veto. When the King, five years later, canceled the charter of the London Company, he did not disturb this legislative body. It early acquired the name of the "Grand Assembly." At first, while the number of the colonists were few, the laws were enforced by the Governor and Council; but as the number increased and separate plantations were opened up, it became necessary to increase the judicial tribunals.

By the terms of the third charter the company was required to hold a court once a week or oftener, and in addition thereto "for the handling, ordering, and disposing of matters and affairs of greater weight and importance" another court referred to in the charter as a "Great General and Solemn Assembly," to be styled and called "The Four Great and General Courts of the Council, and company of Adverturers for Virginia," was established.

By the act of the Assembly of March 5, 1624, courts were required to be held at Charles City and Elizabeth City, with a jurisdiction in suits and controversies not exceeding in value one hundred pounds of tobacco, and for the punishment of petty offenses, with the right of appeal to the Governor and Council. The judges of these courts were the commanders of the places where the courts were held, and "such other officers as the Governor and Council shall appoint by commission."

From 1623 to 1629, there is no notice taken in the proceedings of the London Company of any assembly having been held in Virginia except what can be gathered incidentally from references to other official acts. It was during this period that the charter of this company was canceled, and the company dissolved. It does appear, however, that a number of commissioners were appointed who became members of the monthly courts.

By an act of the Grand Assembly of March 3, 1642-3, all former laws were repealed and a body of eighty-three general laws enacted in their stead; the Governor and Council concurring.

Act fifty-six of that session relates to the monthly courts, and commissioners. It changes the name from monthly courts to "County Courts." Under this act the County Courts were not to have juris-

diction, or take cognizance of any suit concerning any debt under the value of twenty shillings or two hundred pounds of tobacco, but in such "the next adjoining commissioner to the creditor, to have jurisdiction, and hear, and decide the case." The mode of enforcing the judgment was as follows: "In any case of non-performance the said commissioners are authorized to commit to prison the person who is refractory to such order, as aforesaid."

Justices of the Peace.

Prior to act thirty-one, passed by the Grand Assembly in March, 1662, justices of the peace were called commissioners, and it was by this act that they were for the first time called justices of the peace. They received no fees or salaries for their services until in recent years. Of the various courts established in these early periods, the Justice's Court is the only one which has survived. The jurisdiction has been changed to some extent from time to time, but as courts for the trial of trivial controversies, and as conservators of the peace, they remain substantially the same as when created, nearly three hundred years ago.

Since the constitution of 1851, justices are elected by the people for a number of years, instead of being appointed by the Governor for life.

County Courts.

As has already been said, the Monthly or County Court was one of the first courts instituted by the Governor and Council of the London Company. It was originally held by the commander of the plantation or borough, and such commissioners (afterwards called justices of the peace) as might be appointed by the Governor and Council. At first they were called Monthly Courts but afterwards styled County Courts by the act of 1642-3. They were finally extended to every county in the colony. As early as 1645, these courts had become courts of general jurisdiction, both in law and equity. By act thirty-one, of the Grand Assembly, session of 1661-2, eight persons were to be appointed in each county, to form the County Court. Thus was created the County Court system—a system which remained substantially as organized until the constitution of 1851 when the changes were made in the selection, jurisdiction, and tenure of office of justices of the peace. These changes had an injurious effect upon the "County Courts." This marks the beginning of the down-fall of a system which had been, for nearly two centuries, exceedingly popular. Many distinguished men had served on this court, among whom was John Tyler, afterwards a district Judge of the United States, and the father of President John Tyler. President Thomas Jefferson's first office was that of a justice of the peace and member of the County Court. An effort was made in the constitutional convention of 1829-30 to abolish this court, but it was resisted by such distinguished lawyers as Chief Justice John Marshall, Governor Giles, ex-President Madison, Benjamin Watkins Leigh, Philip P. Barbour and others. The system was attacked on the grounds that the appointment

of members by the Governor for life upon the recommendation of the court itself was not in harmony with republican principles—that being self-chosen for life, they could perpetuate their own body according to their liking for ever. In addition to this it was insisted that a court with such extensive jurisdiction should not be selected from among men who had but little or no knowledge of law, as was the case with a large number of the justices, or as was aptly expressed in a debate in that convention by Mr. Henderson of Loudon County;—"the Magistrates were, in general, worthy men but they were not acquainted with law and were not capable of duly discharging the duties that were required at their hands." The convention, however, endorsed the system and continued it in the constitution. The question again arose in the convention of 1851, and although the court was not abolished, its usefulnes was to a great extent destroyed. In 1869, the decisive step was taken by Virginia of radically changing this ancient tribunal, by requiring the court to be held by a Judge learned in the law. The County Court system was not embraced in the first constitution of West Virginia, adopted in 1863, but was restored in almost its original form by the constitution of 1872. It was very unpopular in West Virginia, and was abolished by a constitutional amendment in 1879.

Corporation Courts.

By an act of the Grand Assembly of 1624, Courts were to be held once a month in the corporations of Charles City and Elizabeth City. They were from time to time extended to other cities and to some of the remote plantations. At a later period the County Courts were held by justices of the peace, and the Corporation Courts by the mayor, recorder, and alderman. The Corporation Courts had, essentially, the same jurisdiction within the corporations that County Courts had in the counties; however, the jurisdiction of the Corporation Courts (sometimes called Husting Courts) was fixed by the statute creating it.

General Court.

Shortly after the establishment of the Virginia Colony, there was created a higher tribunal than the Monthly or County Courts. It was held by the Governor and Council, and called the "Quarter Courts." In 1661-2, the Grand Assembly changed the name of this Court to that of "General Court," and by this name it was known until abolished in 1851. From the time of the organization of the General Court, up to 1776, it was the most important judicial tribunal in the Colony. It had general original jurisdiction, and appellate jurisdiction from the County Courts. It was a court of last resort except as to certain causes which might be appealed to the courts of England and, for a time, certain causes which might be reheard by the General Assembly of the Colony.

The Judiciary System of Virginia was radically changed by the constitution of 1776, and the laws made thereunder. The General Court remained in name, but was deprived of much of its jurisdiction. A

Chancery Court was then created and equity jurisdiction taken from the General Court.

By the act of the General Assembly of 1777, five judges were authorized, and they were required to hold two terms of court every year. By the act of December 22, 1788, the state was divided into districts. The number of judges was increased and one of these judges was required to hold a term of court every year in each district. These terms were in addition to the two sessions to be held by all the judges annually. These district courts were courts of general jurisdiction except that they had no chancery powers. In 1809 the district court was abolished and the Circuit Superior Court of Law, substituted. The state was divided into circuits, and courts held in every county of the circuit by a judge of the Grand Court.

When the Chancery Court was abolished by the constitution of 1831, the Circuit Superior Court of Law was superseded by the Circuit Superior Court of Law and Chancery. These courts were also held by judges of the General Court; one being assigned to each circuit. For many years, the General Court had exclusive appellate jurisdiction in criminal cases. It will be observed that prior to the constitution of 1851 all judges except those of the court of appeals were judges of the General Court. After an existence of 190 years, this most important of all the Virginia courts was abolished by the constitution of 1851.

District Courts.

As we have just seen by the act of the General Assembly of 1788, District Courts were created and held by judges of the General Court. These courts were superseded by the Circuit Superior Court of Common Law, in 1809.

Appeals Prior to 1776.

Upon the establishment of the Monthly Courts in 1624, appeals were allowed from them to the Governor and Council. Appeals from the Quarterly Courts might be taken to the General Assembly, and in certain classes of cases appeals might be taken from the Governor and Council, to the Privy Council of England.

Chancery Courts.

It has been the policy of the people of Virginia since the revolution to keep separate common law, and chancery jurisdiction. The constitution of 1776 authorized the General Assembly to appoint "Judges in Chancery." From that time until 1831 the two jurisdictions were kept entirely separate and were exercised by separate courts, except that county and corporation courts had jurisdiction in both common law and chancery, and even in these courts separate "order books" were required. In 1777, three chancellors were authorized to hold the "High

Court of Chancery," but only one chancellor (George Wythe) was appointed. He held this court until 1802 when two additional chancellors were added and subsequently the state was divided into four districts. The chancellors' court was abolished by the constitution of 1831, and chancery jurisdiction given to the judges of the Circuit Superior Court of Law and Chancery.

Circuit Courts and Supreme Judges—1851.

In 1851 when the General Court was abolished the Circuit Court was established. This court had substantially the same jurisdiction as the Circuit Superior Court of Law and Chancery. The constitution of 1851 established a somewhat complex judicial system, and made some very radical changes. Under this constitution, for the first time in the history of Virginia, judges were elected by the people and the term of office limited to a certain number of years. The state was divided into twenty-one judicial circuits, ten districts, and five sections. A judge was to be elected for every circuit and required to hold at least two terms of court a year in every county in his circuit. A district court was to be held at least once a year in every district by the judges of the circuits constituting the sections, and the judge of the Supreme Court of Appeals for the section of which the district formed a part; this was an appellate court. For each section a judge of the Supreme Court was to be elected by the voters therein.

West Virginia Courts.

By the constitution of 1863, the people of West Virginia were given a very simple and inexpensive system of courts.

The Supreme Court of Appeals consisted of three judges, elected by the voters of the state. for twelve years. The state was divided into eleven circuits; one judge was elected for every circuit, by the voters therein, every eight years. At least three terms of court were to be held in every county annually.

The constitution of 1872 added two circuits and an additional judge for the first district. The number of these circuits has been increased from time to time until it reaches twenty-three circuits and twenty-four judges and nine intermediate and criminal courts with limited jurisdiction, and in these courts all the legal business of the state is transacted. The number of judges of the Supreme Court has been increased, from time to time, to five. The old County Court system was revived by the constitution of 1872, but finally, and no doubt forever as a court for the trial of causes, abolished by the constitutional amendment of 1879. The civil and criminal jurisdiction of justices of the peace has been largely increased from time to time; and now this most ancient of all our judicial tribunals is an all important part of our judiciary system.

Many decisions made by the Virginia courts since 1776, and before June 20, 1863, are still in force in this state, and constitute parts of the laws of West Virginia.

The judicial system of West Virginia is a development of the old system referred to.

The Restored Government of Virginia.

An ordinance adopted by the constitutional amendment of Virginia, April 17, 1861, was ratified by the votes of the people, May 23, 1861. The effect of this ordinance, if valid, would have been to dissolve the union, created between Virginia and the other states, by the constitution of the United States. Many of the people of Virginia, and especially those living in the northwestern part of the state, believed this could not be done, and treated this ordinance as being absolutely null and void. Acting upon this theory a constitutional convention assembled at Wheeling on the eleventh of June 1861, and by an ordinance adopted on the thirteenth day of June, demanded the reorganization of government of the commonwealth, and that the offices of all who adhered to the ordinances of April 17, 1861, whether legislative, executive, or judicial, be vacated. The convention then proceeded to reorganize the state government and to restore the offices thus vacated. This was not as is some times alleged the creation of a new government, but merely a restoration of the old.

The purpose of this convention was not to form a new government or change the old one; it was simply an adherence to the regular government and an effort to prevent its destruction. The Governor and state officers and practically all the other executive officers, all the judicial officers and a large majority of the legislative officers, had abandoned and forfeited their offices. This public movement by the people of the state was, properly speaking, a restoration of constitutional government in Virginia. There was no law providing for such contingencies for the reason that no such conditions were ever anticipated. This seemed to be the only practical method of preventing anarchy. A Governor, Lieutenant Governor, and Attorney General were appointed by the convention for six months, and provisions made for the appointment and election of such other officers as should vacate their offices. The government so organized was recognized by the federal authority as the "Legal Government of Virginia." This made possible the formation of the state of West Virginia, in strict conformity with law.

West Virginia.

The government of Virginia was restored in the manner I have indicated, by an ordinance of the convention adopted on the 19th day of June 1861. Not the least of the work to be done by the men who were charged with the duty of organizing the new state, was that of providing a system of laws for its government; to provide against the disasters which would follow the creation of a new state with no laws for the protection of its people. The constitution very properly provided that "such parts of the common law and laws of the state of Virginia as are enforced within the boundary of the state of West Virginia when

this constitution goes into operation, and are not repugnant thereto, shall be and continually the law of this state until altered or repealed by the legislature."

The constitution took effect June 20, 1863 and the legislature assembled the same day, and proceeded to enact the necessary laws. On the twenty-seventh of October, 1863, an act was passed appointing Daniel Lamb Esq. of Wheeling to revise, collate, and digest a code to be called the code of West Virginia containing all the statute laws of a general nature in force in the state and to prepare and to report to the legislature such amendments and additional laws as he may deem necessary. Mr. Lamb accepted the appointment and at the session of the legislature in 1867, reported chapters one to sixty-two inclusive.

At that session of the legislature, Mr. Lamb being in failing health and having an extensive law practice asked to be excused from further filling his contract and thereupon Judges R. L. Berkshire and Thayer Melvin were employed to complete the work. At the session of the legislature of 1868 these gentlemen reported the residue of the code, as prepared by them but too late for publication at that session and a special session of the legislature was held in June and July, 1868, for the purpose of completing the code. The labor was so far finished that it was submitted to a revisory committee of the legislature. This made another extra session necessary in November, 1868. It was not until the regular session of 1869 that the publication of the code was authorized, and Judge James H. Furgison appointed to supervise publication. The code took effect April 1, 1869. Some idea of the magnitude of this work may be gathered from the fact that the legislature with annual sessions and several extra ones, aided by four men of great learning and thoroughly acquainted with the laws of both states, spent more than five years in completing the work. The work was so well done that while we have had several authorized editions of the code, no attempt has since been made to repeal preceding acts, of a general nature, as was done in preparing the code of 1869. Similar action was taken by the colonial government of Virginia in 1642-3 and 1661-2; and also by the general assembly of Virginia in 1792, resulting in the code of 1794, and also in preparation and adoption of the codes of 1819, 1849, and 1860. The revisors of the code of 1869 were required not only to collate such old laws as should be kept in force, but also to suggest others which might be useful in the new state.

Judges of West Virginia.

Under the ordinance of Virginia of June 19, 1861, doubtless, all the judges of Virginia could have been removed from office. The circuit judges were removed and their places filled, but no action seems to have been taken against judges of the Supreme Court. All the supreme judges except Judge George H. Lee of Clarksburg remained in office and continued to hold court at Richmond during the war. Judge Lee did not sit with the court after the April term, 1861. Cases decided during this period are reported in the 16 and 17 volumes of Grattan's

Reports. The city of Richmond and Northwestern Virginia being separated by hostile armies, the people of the latter portion of the state were deprived of the privilege of a court of appeals from the time the war began until the formation of the new state. On the 9th day of July, 1863, the first session of the supreme court of West Virginia was held with Hon. R. L. Berkshire of Morgantown, William A. Harrison of Clarksburg, and James H. Brown of Charleston, the newly elected judges on the bench. This session was held in the Court House of Ohio County at Wheeling; Judge Harrison was elected temporary President and Judge Berkshire subsequently elected permanent President with Sylvanus W. Hall of Fairmont as Clerk. The three new judges were men of learning, ability and great experience in their profession, and, at once, placed the Supreme Court of the State upon that high plane it has ever since occupied. The circuit judges holding office under the restored government of Virginia within the territory of the new state, retired when the state was created and the judges of West Virginia came into office. Of the new circuit judges, three had the misfortune of having articles of impeachment preferred against them; two of them were removed by the Legislature and the other resigned without a hearing. These proceedings occurred in the Legislatures of 1865, 1868 and 1870 respectively.

Court-Made Law.

The Supreme Court has been required to decide several thousand cases and in doing so to pass upon practically all questions possible to be raised in courts. It has preserved a uniform rule of conservatism and adherence to established laws except where changes were clearly in the interest of justice and an enlightened public policy. The radical changes which have been introduced into our judicial system such as evidence, competency of witnesses, rights of married women, actions on insurance policies, commercial instruments, proceedings before justices and other changes have all been introduced by the Legislature. Our courts have adhered generally to the Common Law practice except where modified by statute.

The land titles of the state at the time of the formation of West Virginia were in a most deplorable condition. By constitutional amendments, legislative enactments and long and patient labor by the courts, these impediments to the successful development of the state have been removed.

Attorneys at Law.

Suitors are not, as a general rule, competent to manage their cases before a court and hence a class of persons are authorized to appear for them. These persons are not only of service to their clients but also to the court in the administration of justice. They are usually styled attorneys and are officers of the courts in which they practice. Such is the peculiar relation of attorneys to the court that from time imme-

morial, they have never been permitted to appear without leave granted them in some form. For more than a century, following the first settlement of Virginia, the colonists waged a relentless war against attorneys through the Grand Assembly. At certain periods, they were limited by law in their practice to certain courts; at other times, prohibited from receiving fees; at others, required to serve when their services were demanded, the statute reading, "No attorney * * * shall refuse to be *entertayned* in any cause * * * provided he be not *entertayned* by the adverse party upon the forfeiture of 250-lb. of tobacco."* By a statute passed in 1642, attorneys fees were fixed at 20 lbs. of tobacco in the county courts and 50 lbs. in the quarter courts, the quarter courts being then the court of appeals. The assemblymen realizing the necessity of having some one in certain cases to present the case to the court, passed the following act in 1647, "That in case either plaintiff or defendant by his weakness shall be like to *loose* his cause, that they (the court) may either open the cause in such case of weakness or appoint *fitt* man out of the people to plead the cause and allow him satisfactory requisite and not to allow any other attorneys to private causes betwixt man and man in the country."*

It was not, perhaps, until 1732 that a license to practice law was required. In May, 1732, the Governor and Council were authorized to license persons to practice law who had been examined by men learned in the law. * * * This act was repealed in 1742 but revived in 1745. It was required by these acts that no persons should be licensed to practice law unless found worthy in morals and in legal learning. This precaution has, by the letter of the law, been observed ever since, although as a distinguished law writer has remarked, "It is very loosely applied in practice." No one can now obtain a license to practice law in this state without first having a certificate from the county court of the county in which he has resided for a year that he is man of good moral character; and he must also have passed a satisfactory examination under the rules and regulations prescribed by the Supreme Court of Appeals or shall have diploma of graduation from the law school of the West Virginia University.

Development of Taxation and Finance

By Hon. W. P. Hubbard, of Wheeling.

The development of taxation and finance in West Virginia may be taken to mean the progress made by the State in its legislation and practice, respecting the sources of revenue, the methods of taxation, the regulation of expenditure, and the public accounting. A discussion of it might naturally extend to the financial administration of counties and

*L. Henning Stat. 349.
**4 Hen. Stat. 360.

other local sub-divisions, but that important subject can receive only incidental mention here, because any discussion of it would transcend the limits imposed on the present paper, and because the data needed for accurate discussion are not available.

It is only since West Virginia had a tax commissioner, and especially since he was given supervision of public accounting, that statistics of much value have been assembled concerning county and other local taxes. Even as to State matters, the statistics for the earlier years of the State's history are not very full or accurate. As the population, wealth, revenues and expenditures of the State increased, statistics respecting them necessarily received more attention until now they are fairly full, although there should be a still better record of the facts with respect to these important branches of the state's activity. The value of statistics lies largely in the comparisons which they make possible, and for the reason that has been suggested, it is not easy to make accurate comparisons as to State finances, and not possible to do so as to the financial affairs of counties and municipalities.

The courtesy of the Auditor has made it possible to show here some of the facts marking the State's progress which appear upon the records of his office. Under his direction the statistics for fifty years so far as available from those records have been gathered with great care and labor. In order to save space, the figures so supplied have been rearranged and somewhat abbreviated in the following tables.

RECEIPTS BY STATE TREASURY

(In Thousands of Dollars.)

Population in Thousands (a).	Year.	State Tax	(b) General School Tax.	School Fund.	Licenses	Public Utilities.	Insurance Co's.	Corporation Charters.	Inheritances.	Fees, Secretary & Auditor.	Board of Control Fund.	Building Fund.	State Road Tax.	Miscellaneous.	Total.
396	1863	...	...	...	.....	.....	...	...	...	..	...	..	...	302c	302
403	1864d													273	273
409	1865d	302	79	...	.....	.....	...	...	...	..	...	..	...		381
416	1866d	118	214	17	6	.....	...	...	...	..	...	..	...	41	396
422	1867e	361	153	23	55	.....	...	...	...	..	...	..	...	32	624
429	1868f	316	172	23	40	.....	...	...	...	..	...	..	...	214g	765
435	1869	232	161	21	40	.....	...	...	...	..	...	..	...	157h	611
442	1870	225	163	18	27	871	...	...	...	..	...	..	...	47	567
460	1871	267	170	29	41	3	...	...	...	..	...	43	...	21	574
477	1872	288	227	13	70	2	...	...	...	..	...	73	...	69	742
495	1873	265	240	16	57	4	...	...	...	..	...	63	...	35	680
513	1874	258	230	22	49	2	...	...	...	..	...	67	...	68	694
530	1875	245	214	9	38	2	...	...	...	..	...	..	...	39	547
548	1876	259	219	15	40	9	...	...	...	..	...	..	...	95	637
566	1877	266	195	16	32	8	...	...	...	..	...	..	...	60	577
583	1878	273	257	25	56	10	...	...	...	..	...	..	...	72	693
601	1879	284	224	20	36	10	...	...	...	..	...	..	...	104	678
618	1880	243	243	24	43	27	...	...	...	..	...	..	...	69	649
633	1881	245	229	18	49	40	...	...	...	..	...	..	...	104	685
647	1882	275	299	33	31	52	...	...	...	..	...	..	...	152	852
662	1883	289	246	32	28	59	...	...	...	..	...	..	...	165	819
676	1884	331	227	30	49	101	...	...	...	..	...	..	...	123	861
691	1885	266	186	35	38	99	...	...	...	..	...	..	...	165	789
705	1886	343	406	23	75	190	...	1	...	..	...	..	...	130	1,168
719	1887	322	398	18	112	209	...	15	...	..	...	82	...	160	1,316
734	1888	347	371	44	81	213	...	12	...	..	...	12	...	125	1,205
748	1889	337	314	27	157	222	...	16	...	..	...	..	...	86	1,159
763	1890	419	364	29	106	237	...	32	...	..	...	..	...	19	1,206
782	1891	380	340	114	148	298	...	49	...	..	...	..	...	23	1,352
802	1892	359	346	39	135	280	...	64	...	..	...	1	...	34	1,258
823	1893	497	328	134	227	292	...	69	5	..	...	..	...	93	1,645
841	1894	468	394	142	135	367	...	67	7	..	...	..	...	71	1,651
861	1895	363	406	40	284	369	...	56	1	..	...	..	...	63	1,582
880	1896	423	407	65	132	379	...	80	1	..	...	..	...	38	1,525
900	1897	493	376	83	238	387	...	104	2	..	...	..	...	60	1,743
920	1898	475	436	107	189	393	...	125	3	..	...	..	...	97	1,825
939	1899	434	366	179	202	412	...	131	16	..	...	..	...	96	1,839
959	1900	451	443	83	219	415	...	140	4	..	...	..	...	51	1,806
985	1901	493	437	79	306	420	...	381	3	..	...	..	...	70	2,189
1,012	1902	564	493	88	202	448	36	376	6	..	...	..	...	79	2,292
1,038	1903	529	555	63	415	490	41	391	1	..	...	..	...	62	2,547
1,065	1904	547	566	12	251	547	48	333	6	..	...	..	...	46	2,356
1,092	1905	581	774	40	677	604	51	342	11	17	...	..	...	69	3,166
1,118	1906	437	821	50	579	617	52	372	26	53	...	..	...	61	3,068
1,145	1907	354	722	57	597	1,448	55	389	95	57	...	..	...	71	3,845
1,171	1908	299	615	10	534	1,811	111	400	88	52	...	..	...	88	4,008
1,198	1909	650	713	72	1,051	1,821	112	429	116	58	...	..	...	21	5,043
1,221	1910	576	780	59	798	1,881	116	445	92	67	...	..	115	42	4,965
1,251	1911	639	748	18	802	1,984	126	446	108	61	293	..	103	52	5,380
1,278	1912	338	797	60	800	2,139	133	442	168	66	412	..	9	77	5,441

* No report made by the Auditor in 1864.

Notes to Receipts

a. These figures are based on the records of the United States Census bureau, which show exact returns for Census years and official estimates for other years.

b. The greater part of this is distributed to counties, etc., as shown under the appropriate head of expenditures.

These figures include capitation taxes which, until recent years, do not appear separately on the Auditor's books.

c. $175,000 from the State of Virginia.

d. Fiscal year began January 1st.

e. Fiscal year ended September 30th.

f. From 1868 until 1913 fiscal year began October 1st.

g. Including $175,000 received from United States.

h. Including $127,679 received from United States.

i. Received from B. & O. R. R. Co.

EXPENDITURES FROM STATE TREASURY

(In Thousands of Dollars.)

Year.	Salaries.	Legislature.	Printing, Binding, etc.	Militia.	General School Fund.	School Fund.	University.	Normal Schools.	Hospitals and Charitable Insts.	Criminal Charges.	Building Fund.	War Claims.	Public Utilities Tax Distributed.	Miscellaneous.	Total.
1863	16	45	..	14a	...	...	...	...	...	8	...	...	.....	13	96
1864											...	...	.....	232	232
1865	62	19	6	..	68	7	...	...	22	34	...	144	.....	55	417
1866	51	21	12	..	107	5	...	...	54	44	...	151	.....	33	478
1867	66	23	13	..	155	...	1	5	132	67	...	30	.....	127b	619
1868	66	45	12	..	202	27	16	11	93	60	...	107	.....	112c	751
1869	59	21	14	..	139	36	16	16	78	59	...	15	.....	100d	553
1870	61	22	13	..	57	22	23	25	78	52	...	...	.....	67	420
1871	60	27	31	..	247	34	13	8	112	56	...	...	.....	70	658
1872	63	29	22	..	178	6	17	15	88	55	...	...	3	111e	587
1873	71	75	29	..	250	43	3	...	67	38	40	...	.....	104	720
1874	60	32	27	..	240	...	26	2	73	49	68	...	.....	80	657
1875	59	29	12	..	231	...	18	13	118	29	...	...	1	66	576
1876	58	34	19	..	220	46	26	6	110	62	...	...	6	96	683
1877	60	33	21	..	212	16	12	9	94	55	...	...	4	76	592
1878	61	...	11	..	200	1	10	14	89	50	...	...	6	130	572
1879	61	35	25	..	258	44	14	12	124	85	...	...	6	107f	771
1880	60	...	19	..	225	5	10	1	140	82	...	...	6	67	615
1881	65	38	30	1	269	18	12	7	98	45	...	...	16	84	683
1882	68	45	43	1	271	33	15	10	110	56	...	...	34	112	798
1883	68	28	39	..	265	66	14	9	113	51	...	...	22	203	878
1884	77	...	22	..	268	27	17	10	120	44	...	...	48	248	881
1885	79	28	34	..	211	35	16	12	118	40	...	...	35	224	832
1886	77	...	28	..	244	26	16	15	121	74	38	...	137	203g	980
1887	79	46	41	2	418	18	24	20	142	145	97	...	140	152	1,324
1888	84	...	29	..	402	40	20	24	161	71	28	...	198	170	1,227
1889	85	30	36	1	353	29	29	22	161	88	...	...	161	216	1,211
1890	87	32	29	1	313	1	34	23	155	82	...	...	198	86	1,041
1891	95	40	68	6	312	19	35	27	179	68		.	248	214h	1,311
1892	104	...	41	12	375	11	40	61	221	76		.	218	108	1,267
1893	111	43	48	10	364	52	57	57	206	97		.	242	2711	1,558
1894	111	...	36	18	335	95	25	61	220	81		.	324	187j	1,497
1895	117	41	38	19	375	7	12	52	250	86		.	314	111	1,422
1896	116	...	27	15	424	120	31	84	276	86		.	326	76	1,581
1897	124	48	64	34	382	119	48	79	235	168	.	.	327	143	1,771
1898	137	...	20	16	385	55	44	74	240	115	.	.	350	108	1,544
1899	145	54	41	46	405	...	77	92	271	111	.	.	326	214	1,782
1900	144	...	30	24	384	15	106	101	348	107	.	.	381	150	1,790
1901	158	62	41	32	458	151	126	112	394	129	.	.	369	184	2,216
1902	163	...	18	35	456	148	164	124	386	105	.	.	391	157	2,147
1903	208	66	60	62	500	367	197	120	424	157	.	.	424	273k	2,858
1904	222	32	22	35	604	89	148	128	441	141	.	.	483	2901	2,635
1905	270	83	48	52	580	47	154	138	446	114	.	.	531	439m	2,902
1906	268	1	31	45	729	45	155	170	437	105		.	573	541n	3,099
1907	308	100	54	48	770	62	161	122	494	77	.	.	1,323	286o	3,806
1908	402	55	41	54	762	7	146	127	483	71		.	1,695	409p	4,352
1909	372	87	49	57	705	56	127	141	428	96	...	...	1,821	534q	4,473
1910	416	...	42	57	874	79	179	148	441	84	...	...	1,876	615r	4,811
1911	455	69	52	59	747	11	166	184	459	75	151	210	1,985	560s	5,183
1912	396	...	43	50	764	40	181	216	270	65	368	16	2.137	739t	5,466

(No report made by the Auditor in 1864.)

Notes to Expenditures

a. Includes $11,963 for arms.

b. Includes $79,000 paid on penitentiary.

c. Includes $65,819 paid on penitentiary.

d. Includes $50,000 paid on penitentiary.

e. Includes $64,000 expense of constitutional convention.

f. Includes payments on public buildings, $50,000.

g. Includes payment on Capitol building, $53,232.

h. Includes payment to the School fund, $83,541.

i. Includes payment to the School fund, $100,970.

j. Includes payment to the School fund, $100,000.

k. Transferred from State to General School Fund, $330,500, and from the School Fund to General School Fund, $36,767.

l. Transferred from the School Fund to General School Fund, $36,767, and invested for the School Fund, $52,000.

m. Transferred from State to General School Fund, $230,944, and from the School Fund to General School Fund, $36,767.

n. Transferred from State to General School Fund, $280,195.

o. Transferred from State to General School Fund, $58,077.

p. Transferred from State to General School Fund, $297,016.

q. Transferred from State to General School Fund, $317,254.

r. Transferred from State to General School Fund, $405,716.

s. Transferred from State to General School Fund, $412,716.

t. Transferred from State to General School Fund, $474,285.

Rates of State and State School Levies for the Years from 1863 to 1912, Inclusive (upon each $100)

	State.	State School.	
1863	$ .40	$ .00	
1864	.30	.00	
1865	.30	.10	
1866	.30	.10	
1867	.30	.10	
1868	.20	.10	
1869	.20	.10	
1870	.25	.10	
1871	.25	.10	
1872	.25	.10	
1873	.25	.10	
1874-1882, inclusive	.20	.10	
1883	.25	.10	
1884	.20	.10	
1885-1904, inclusive	.25	.10	
1905	.16	.06	
1906	.06	.02½	
1907	.05	.00	
1908	.05	.00	
1909	.06	.00	(1c of which is Road Tax.)
1910	.05½	.00	(1c of which is Road Tax.)
1911	.02½	.00	
1912	.01	.00	
1913	.06	.00	

Growth of Population, Revenue and Taxes

A few years for which the figures are at hand may be compared, so as to show the recent growth of the state in population; in taxable wealth, gross and per capita; the amount of state taxes; the amount of all taxes; the amount per capita of state revenue, of state property taxes, and of all taxes; and the total average rate of levy.

The comparative growth by decennial periods of population and taxable property in West Virginia may be stated as follows, all the valuations except that for 1910 being from statistics compiled by the United States Census:

[That for 1910 is taken from the State assessment, the census valuation for that year not having been compiled yet. The resulting estimate of per capita wealth for that year is therefore on a different basis from the others, and for purposes of comparison is probably too large.]

	Population	Taxable Wealth	Approximate Wealth per capita	State Revenue per capita. (a)
1870	442,014	$ 190,651,491	$430	$1.28
1880	618,457	340,000,000	550	1.05
1890	762 794	426,887,358	560	1.58
1900	958,800	635,607,830	660	1.47
1904	1,065,055	814,340,202	760	2.21
1910	1,221,119	1,119,828,000	925	4.06

a. Includes pulbic utilities taxes distributed to counties.

The following table shows, in separate columns, state taxes, county and

local taxes on property, and the per capita amount of each for 1904 and the years 1909 to 1912, inclusive:

(Stated in Thousands.)

	Population	State Taxes	All Other Taxes	Per capita State	Per capita All Other	Per capita Total
1904	1,065	976	5,033	$ .91	$4.72	$5.63
1909	1,198	638	8,664	.53	7.23	7.76
1910	1,224	611	8,846	.50	7.22	7.72
1911	1,251	287	9,453	.23	7.56	7.79
1912	1,277	116	9,909	.09	7.76	7.85

The total average rate of levy thoughout the state on each $100.00 of assessed value was for:—

1904	$2.15 1/2
1905	1.84 1/2
1906	.76 1/2
1907	.83 7/8
1908	.84 1/8
1909	.86 1/2
1910	.84 1/2
1911	.84 5/8
1912	.85 5/6

The following table will show for 1904 and the years 1909 to 1912, inclusive, the amount of taxes levied by the several taxing authorities. The amounts are stated in thousands of dollars to save space:

	State	Counties	Schools	Roads and Bridges	Municipal	Total
1904	$967a	$1,701	$2,095	$ 502	$ 735	$ 6,009
1909	638b	2,752	3,688	729	1,395	9,302
1910	611b	2,716	3,931	795	1,404	9,457
1911	287	2,727	4,284	952	1,490	9,740
1912	116	2,624	4,583	1,132	1,570	10,025

NOTE:—a. Including State school tax. b. Including State road tax.

The facts shown by the foregoing tables afford the principal basis for the conclusions here stated and by them the reader may test the accuracy of those conclusions, or be guided to others. They will enable him to measure the growth of the State's revenue and expenditures, to classify them, to note the comparative importance of the different classes, to trace the changes in method from time to time, and to test the efficiency and economy of the State's administration.

Of course, comparisons based on these figures may not be absolutely accurate, because changes in the assessment day or in the fiscal year, in the sources of revenue and objects of expenditure, or in methods of bookkeeping and administration, may well make it difficult to apply the same classification throughout the table, and because the growth of treasury transactions tends to complicate the accounts.

A state may be moved, as some individuals are, by the desire to be efficient. When it has clear purposes and ideals, its activity may be thought-

ful and logical and definite, and it comes to have a controlling policy. It has been said that the more conscious a state is of having such a policy, the higher is its place in civilization. There are various phases of government activity, though, and a state may have and be conscious of a definite policy as to one of them and not as to another. For example, West Virginia's efforts for good schools have been more persistent and efficient than its efforts for good roads; and the State would naturally seem more civilized to a teacher than to an automobilist.

Taking her whole history together, West Virginia cannot boast a definite, traditional and controlling policy as to taxation and finance. The steps she has taken have for the most part been rather to meet some immediate need than to heed the calls of justice. This may be due in part to the rapidly changing composition of legislative bodies. At present legislators rarely serve more than one term and cannot be expected to study seriously or understand thoroughly State finances, so that the lessons of experience cannot have their due weight. Under a recent wise amendment to the constitution of the United States, providing for the election of Senators by the people, members of the legislature will be chosen upon other considerations, and it is to be hoped that capable men may there find creditable careers in aiding the normal, harmonious and logical development of the financial system of the State.

On the single occasion when a fairly complete financial plan was presented, the people of the State came to its understanding and approval with reasonable promptness and vigor, but political controversy and private interest made such breaches in it that what the legislature enacted was rather a collection of beneficial amendments than a compact, correlated financial system.

Naturally, the purposes, tendencies and results of State taxation have differed from time to time, as differing motives and interests gained or lost influence. These changes of purpose and result may fairly be assigned to five periods of the State's history, and these periods coincide nearly enough with the decennial periods defined by the taking of the United States Census to justify us in using the latter, especially as that will open a wider range in making comparisons.

The Period from 1861 to 1870

The first of these periods extends from the formation of the State, or, indeed, from the reorganization of Virginia in 1861, until 1870. The story of taxation and finance in West Virginia really began when the Government of Virginia was reorganized and had its seat at Wheeling. The men and influences behind that movement were the same which brought the new State into being two years later. The assets of the restored government at first were the laws of Virginia and the recognition of the United States government, for it had no organized body of officers, not even an auditor or treasurer; it had no money and no credit; it could not pay the members of the Convention of June, 1861. But the ways of those men and those times were practical and direct. Governor Pierpont and Peter G. Van Winkle, afterwards United States Senator, called on the cashiers of the two princi-

pal banks at Wheeling. The Governor told them that a State without money was of no account and that he wanted $10,000 to pay the expenses of the convention, saying that he did not ask a loan to the State, but wanted a loan to himself on his individual note, endorsed by Mr. Van Winkle. On that paper he got $5,000 from each bank, with which he paid the expenses of the convention. The seed of the finances of West Virginia was then sown.

Neither then nor afterward, when West Virginia was formed, was there any effort or, indeed, any opportunity to consider and plan financial organization or methods of taxation and the men who were then at work had not been trained in the investigation of such questions.

The restored government of Virginia in February, 1863, in contemplation of the formation of the new State, re-enacted in substance the tax laws of Virginia, except as to slaves.

The West Virginia constitution of 1863 kept in force the common law and statutes of Virginia not repugnant to that constitution. So West Virginia, at its formation, was provided with a fully developed financial system. This had its advantages and its drawbacks. Every other new State was formed in time of peace and had an opportunity to establish its finances in accordance with the needs and spirit of its own people, unembarrassed by any existing system and undisturbed by violence. Every one of them came into being with the good will of all its own people and of the other states. West Virginia, in the midst of war, scarcely assured of its own existence or of that of the Union to which it had been admitted, had problems which were more important even than those of finance and which demanded all its powers. Its men had left productive industry to engage in war. Some were fighting for the State's existence, and it had to contribute to their support as well as bear its ordinary charges. Others of its own citizens were fighting to destroy the State. In nearly half its territory its taxes could not be collected. Railroads were largely exempted from taxation for some time by their Virginia charters. Under such conditions West Virginia's financial history in that early period was creditable as well as its political history.

With an old system in operation, familiar to the people, strengthened by many interests, influences and prejudices to say nothing of inertia, if West Virginia, even after the war, had desired an ideal system, it would have had the double task of getting rid of the old and forming the new and better one. Therefore, it is not remarkable that the progress that has been made in financial methods in fifty years has been somewhat slow, halting and irregular, with an occasional backward step, or that there is still lack of a thorough and symmetrical system.

The changes in the old system from the time the State was formed until the present, although some of them are important, have for the most part been gradually made, as the need of funds and the appearance of taxable subjects suggested them, and have been rather practical and amendatory than logical and fundamental in their nature. While old taxes have been increased, or in some instances disused, and new taxes have been added, while new methods of assessment and collection have been adopted and new checks on expenditures have been provided, and while, as the State grew,

the public undertakings of the State have widened, yet most of the changes have been more in method than in substance. Notable exceptions to this are to be mentioned later.

State Indebtedness

The formation of West Virginia brought into being a new and specific problem—the apportionment of the debt of Virginia—which, though long dormant, has of late years become acute and now is before the Supreme Court of the United States for determination.

West Virginia has no public debt of its own, its constitution forbidding that such debt should be contracted, except to meet casual deficits in the revenue, to redeem a previous liability of the State, to suppress insurrections, to repel invasions, or defend the State in time of war. Fortunately, none of these conditions, unless that which mentions a previous liability of the State was intended to refer to some portion of the debt of Virginia, has ever existed to an extent which caused an indebtedness of any considerable size or for any considerable time.

The sums of money borrowed by the State of West Virginia, as shown by the reports of the State auditor, on account of deficits in the State revenue, are as follows

1876	Borrowed from The School Fund	$ 46,000	
1876	Borrowed from Banks	24,000	$ 70 000
1877	Borrowed from Banks		40,541
1878	Borrowed from Banks		55,000
1879	Borrowed—Not shown from whom		64,000
1880	Borrowed from The School Fund	$ 5,000	
1880	Borrowed from Banks	40,000	45,000
1881	Borrowed—Not shown from whom		80,000
1882	Borrowed—Not shown from whom		110,000
1883	Borrowed—Not shown from whom		153,000
1884	Borrowed—Not shown from whom		113,000
1885	Borrowed from The School Fund	$ 34,000	
1885	Borrowed from Banks	110,000	144 000
1886	Borrowed from The School Fund	$ 25,000	
1886	Borrowed from Banks	10,000	35,000
1887	Borrowed from The School Fund	$ 18,000	
1887	Borrowed from Banks	50,000	68,000
1888	Borrowed from Banks		75,000
1889	Borrowed from The School Fund	$ 15,000	
1889	Borrowed from Banks	40,000	55,000
1890, 1891 and 1892, nothing borrowed.			
1893	Borrowed from The School Fund		50,000

Reports do not show any further loans to the State, up to the present date.

In December, 1863, the State of West Virginia passed its first general tax law. At first the expenses of the State, outside of the war expenses, were

very light, providing the bare necessities of civil government on a modest scale. By the end of the first period, the war with its harassing problems and extraordinary expenses was over, and the State was fairly launched upon its normal career. Throughout this period State revenues were derived almost entirely from taxes on property and on licenses. From these and without any resort to unusual methods, the expenses of government were met. That could have been done only by the exercise of remarkable economy and efficiency in every branch of the government. It is without parallel in the subsequent history of the State, and indicates a business ability in the fathers worthy of mention with their statesmanship in creating a commonwealth.

The Period 1870 to 1880

At the beginning of the second period, that from 1870 to 1880, there was some recurrence to the institutions and methods of Virginia, and a disposition to disturb the legislation of the preceding period. Shortly after 1870 the State came under the control of those who were attached to the sentiments and methods of the old State and were not entirely satisfied with the changes which had been made in form and substance by the legislation of the new State. A new constitution was adopted in 1872. In terms it permitted the taxation of privileges and licenses. This, perhaps, was unnecessary in view of the well-settled rule that all the legislative power of the State may be exercised by its legislature without any special grant thereof. Indeed, the power of taxation had been widely exercised in Virginia, under the constitution of 1830, which contained no grant of taxing power. This expression in the constitution of 1872 may be taken, however, as an indication of willingness that the field of taxation might be widened. If, however, the legislature could only exercise such powers as were especially granted to it by the constitution, as a majority of the constitutional convention seem to have thought, if we may judge from the many grants of power made in the constitution to the legislature, this provision would have been retrogressive, rather than progressive. It would have hampered the taxation of public utilities and prevented the taxation of inheritances.

During this period taxes on railroads (included in the table under the caption of "Public Utilities") were collected in small amounts, and in the years 1871 to 1874, inclusive, temporary taxes were collected for the construction of public buildings aggregating for the four years nearly $250,000. The averages of revenues and disbursements in this period were almost identical with those in the first period.

The Period from 1880 to 1890

In the third period, from 1880 to 1890, the features of interest were the so-called supplemental order of Governor Jackson against certain exemptions, and the report of the first State Tax Commission. Although the constitution of West Virginia of 1863 definitely provided that all property should be taxed in proportion to its value, but that property used for certain

specified purposes might be exempted from taxation, the first legislature undertook to exempt other property than that which the constitution said might be exempted. It provided that the products of agriculture, mining and manufacturing remaining on hand unsold on the assessment day should be exempt. These had been exempted by the Virginia legislature under the constitution of 1851, which permitted the legislature to exempt any property it chose. The exemption was repeated in every revision of the West Virginia statute up to 1882. The State being in need of money, the Governor, in 1883, directed the assessors to disregard the exemptions thus provided by the legislature and to assess the property covered by them. Some assessors refused to do this, insisting that the exemption was legal, or at least that the question was one for the legislature and the courts and not for the Governor. The question was taken to the Supreme Court of Appeals, and it upheld the action of the Governor. The assessments were ostensibly made accordingly, but the addition to the taxable property thereby was very inconsiderable, increasing the total about four per cent. The exemptions, which were more considerable, and which wrought the greatest injustice, were not those which had been expressed in legislation, but others which had grown up gradually in practice, and under which the larger portion of intangible personality escaped assessment, and a large part of the value of real estate escaped taxation because of its under-valuation. The principal revenue of the State was derived from taxation on property assessed by the assessors of counties or of districts within counties. The rate of State levy being the same in all counties and districts, it was to the interest of each of them to have its property assessed as low as possible, because the lower its assessment, the less was the percentage of the State tax which it must pay and the greater the percentage which other counties or districts must pay. The assessors of the various counties and districts were impelled by local sentiment to reduce their assessments as low as possible, and an assessor was hardly deemed patriotic who would let himself be outdone by another in this competition. In counties in which there was more than one assessment district a like condition existed between the assessments in the several districts, the assessor of each endeavoring to protect it against an undue share of the county levy.

Before 1904 re-assessments of real estate were made when ordered by the Legislature, at intervals of about ten years, usually when more revenue was needed. These re-assessments were made by commissioners appointed for the purpose in the several counties and assessment districts, and the commissioners were men of standing and ability. It was always necessary, the State property tax then being a matter of importance, to have the assessments made by the several commissioners equalized as between the counties and districts. This was ordinarily done by the Board of Public Works, until the re-assessment of 1899, when a special board of equalization composed of five of the most capable men of the State did the work. That Board asked each commissioner "what per cent of the actual appraised value of the real estate was adopted as the valuation" by him. The replies of the commissioners varied all the way from 33⅓% to the full actual value, the percentages stated ranging through 33⅓, 50, 55, 60, 65, 66, 66⅔, 70, 72, 75, 80, 85. In some cases improved lands and wild lands, or lands

and buildings, in the same district were valued at different percentages of their actual value. The injustice of such a state of affairs demonstrated the necessity for an assessment of property at its full, "true and actual value."

The exemption of agricultural or manufactured products was, in its amount and nature, inconsiderable in comparison with these other hindrances to jst taxation. The best result of the Governor's order and of the litigation which followed was that attention was directed to questions of taxation and finance, and the public mind was to some extent prepared for the consideration of more important questions of that kind which were later to b ebrought to its attention.

Further interest in questions of this sort attended the appointment and report of a tax commission of three members appointed by the Governor in 1883 under authority of a resolution of the legislature. This commission made several reports in which some of the wrongs of taxation as it was administered were exposed in vigorous terms. Unfortunately, the commission was small in number and so could not be very representative, and, still more unfortunately, the three failed to agree in their recommendations. One dissented in all respects from the views of the other two, and the two differed with one another in some important particulars. The Governor was not in sympathy with the suggestions of the commission, and in laying its report before the Legislature declared that the additions to the revenue growing out of the assessment of personalty theretofore exempted would meet the requirements of the State. Perhaps the serious defect in the report of the commission from a practical point of view was that it did not formulate any bills to carry out its views. Under such circumstances, it could hardly be expected that legislation would follow or that anything of practical value would immediately result. So it proved, and the reports of the commission served only as food for thought by those whose tastes or occupations gave them an interest in such questions. The report, however, contained one suggestion of great value, and that was the recommendation that there should be one State head to the administration of the tax system. Later, through legislation based on the recommendation of the second tax commission hereafter to be mentioned, this idea was realized in the appointment of the State Tax Commissioner, the existence of whose office made possible the success of some of the tax reforms advocated by the last-mentioned Commission.

During this period, in 1885, license taxes on corporation charters were first imposed. These taxes being then nominal in amount, the proceeds from them remained inconsiderable during this period. Later they were so developed as to produce large revenues.

The Period from 1890 to 1900.

During the fourth period, from 1890 to 1900, there was but little movement with respect to State taxation or finance. In 1887 an act was passed taxing collateral inheritances. Returns from this, however, did not ap-

pear until 1893, and for years were insignificant. The statute was not very thorough, and its enforcement was still less so. It, however, was in the line of progress and suggested later legislation under which a large revenue for the State was obtained. The Legislature in 1897 appointed a joint special committee to propose amendments of the State Constitution. The Committee gave little attention to taxation and finance, but did propose to limit the State levy to 25 cents and the State school levy to 12½ cents and to deduct mortgages from the valuation of real estate. The first of these suggestions was not of much value in the absence of any provision regulating the valuation of property. The second suggestion was made ostensibly for the benefit of the farming classes. It would have afforded more relief, however, to railroad, mining and manufacturing corporations. In the case of a railroad mortgaged almost to its full value, the mortgage bonds being held outside of the State, it would have left nothing for the State to tax. Indeed, this proposition might have opened the way to much fictitious exemption. These suggestions not only failed of enactment, but failed to attract public attention.

It was in the fifth period, from 1900 to 1910, that public attention was turned strongly to taxation and finance, and that in all branches of the subject decided progress was made by the State.

This was due largely to the need of revenues to meet the growing expenditures of the State, but also to a sense of the injustice which had existed for many years in the administration of the taxing power.

The second tax commission was appointed under a resolution of the Legislature in 1901. It consisted of five members fairly representative of different localities, interests and politics. Through good fortune, or good management, its report was unanimous. It presented bills carrying out in detail the suggestions in its report. These bills together constituted a comprehensive plan. The Commission's suggestions received the approval of the Governor. They were, however, opposed by strong influences in the dominant party of the State, which led to conferences in which it was necessary to make some changes in the bill proposed by the commission in order to facilitate their passage. Still there was opposition before the legislature from strong political and business interests. No action was had at the regular session and it was only at a special session of the legislature, called for the purpose of considering the report and bills, that action on them was had somewhat in accord with the strong popular demand.

While symmetry of the proposition was somewhat marred by the changes which were made, so much as was enacted into law constituted the most important and significant advance ever made in West Virginia finances.

Some of the important matters recommended by the Commission were: the separation of the sources of revenue for State and local purposes, and to that end the abolition of the State property tax and the increase and extension of license taxes to go to the State; the assessment of all property at its true and actual value and the collection of taxes on so much as is taxable, and thereby the reduction of the rate levied on the property; one assessor in each county with the requisite number of assistants; an annual assessment of realty as well as personalty; a graduated tax on inheritances; the assessment of all public service corporations by the

board of public works; limitations on local taxation; the repeal of unconstitutional exemptions; the transfer from the State to the counties of expenses which are in their control; a tax commissioner.

The commission recommended several measures of economy, the enactment of which has brought about considerable saving. In the reports of the commission, too, are other suggestions which ripened into legislation later during the same period, such as a system of public accounting and the establishment of a central board to control the operation and expenses of the State institutions .

In the special session of 1904 many of the acts recommended by the tax commission were passed, and at the regular session of 1905 these were somewhat amended as to phraseology.

The response in the revenues of the State to the amendments relating to the subjects of taxation was prompt. In 1904 the revenue from licenses was $250,496; in 1907, $597,564, and in 1912, $779,508. In 1904 the taxes on inheritances amounted to $6,443; in 1907, to $95 013, and in 1912 to $168,233. The taxes on public utilities in 1904 were $547,448; in 1907, $1,447,659, and in 1912, $2,138,874.

By an act passed in 1904 the fees collected by the auditor and secretary of state were directed to be paid into the treasury. In 1907 these amounted to $56,877, and in 1912 to $65,734.

While the State expenditures for salaries of officers and clerks. and their contingent expenses, increased from $62,000 in 1865 to $396,000 in 1912, the percentage of the revenues going to that purpose has steadily decreased, having been 16 per cent in 1865, 11 in 1875, 10 in 1885, 7 in 1895, 8 in 1905 and 7 in 1912.

The marked increase in State expenditures has been in those for education. Aggregating under that head the payments to the General School Fund, the School Fund, the University and the Normal Schools, they amounted in 1865 to $75,000; in 1875 to $262,000; in 1885 to $273 000; in 1895 to $445,000; in 1905 to $918,000 and in 1912 to $1,674,000, the amount in the latter year being twenty-two times as much as in 1865 and nearly four times as much as in 1895.

Expenditures upon hospitals and charitable institutions have increased from $78,000 in 1870 to $470,000 in 1912.

The disbursement of funds on account of State institutions, educational, charitable and penal, has been since July, 1909, under the direction of a State Board of Control, whose administration has resulted in large saving to the State.

The State taxes on licenses have produced more revenue than any other class of State taxes. While the abolition of liquor licenses will reduce this very much, the consequent financial benefits in the reduction of expenses and otherwise which may be hoped for, will enure mainly to the counties and municipalities. It will be wiser to develop new sources of revenue to make good this loss than to yield to the temptation to increase the State property tax. While the latter seems the easy way, it will be found in its consequences to be expensive and unwise, for it leads back to the objectionable financial methods which were largely discarded in 1904.

Present Conditions, Tendencies and Needs

This consideration and the more serious one of the possible liability of the State for part of the Virginia debt, call for a careful and conservative course on the part of the Legislature, with regard to expenses of the state, and with regard to the powers of the local taxing authorities, and for a like course on the part of those authorities in the administration of their powers.

The public welfare is largely in the hands of local officers, and their zeal in enforcing the law against their neighbors often needs the spur of public opinion. There is an unceasing conflict between private and public interests, and the latter will yield unless supported by a settled public policy continually and vigilantly asserted. As the State enters its sixth decade, there are some indications that popular interest has shifted from matters of taxation to other questions. The legislature is not making progress in state finance; indeed, it is not holding at every point the advanced financial position already won.

While the population is increasing, the capitation taxes are decreasing. The auditor's records show these separately only since 1906, the figures being for 1907, 165,896; for 1908, 166,976; for 1909, 227,509; for 1910, 213,926; for 1911, 208,086; for 1912, 195,939.

Provision has now been made for the increase of the State property tax which had nearly disappeared and should be abolished.

The wholesome limits on the taxing powers of local bodies and on the creation of municipal indebtedness, have been broken down in part.

The Tax Commissioner's office, always efficiently conducted, and always at variance with some private interests, has lately been charged with duties foreign to its nature and original purpose. Some time ago it was given supervision of public accounting, thus bringing it into controversy with local officers throughout the State, who sometimes organize not merely to defeat the enactment of a law in the public interest, but to nullify its execution. Recently, the enforcement of the prohibition law, producing a new set of active adversaries, have been assigned to the Tax Commissioner. Overloading this officer with these new and foreign duties, merely because he has been efficient in those which properly belong to him, and to which his office is adapted, is unwise, and is unjust to the administration of the tax system.

While the finances of the State, therefore, now invite serious study and also amendment at various points, State taxation has not up to this time pressed excessively or even seriously on the industry or resources of the people, and the most urgent problems for the reformer lie in the field of local finance and taxation.

All this is under the control of the Legislature, which may relieve the tax-payer even more by improving his local situation than by direct dealing with the State taxes and expenditure, important as those subjects are.

NOTE.—In the preparation of this article, acknowledgments are due to the Auditor and the Tax Commissioner of the State and to the Director of the United States Census Bureau for statistics and other information promptly and courteously furnished by them, and especially to Dr. Callahan, the editor of this work, for the use of valuable compilations made by him in his studies of the financial history of the State.

Municipal Development

By Hon. George I. Neal, Huntington, W. Va.

The state of West Virginia is only a half-century old; but some of the municipalities within her borders have already passed the century mark—thus again, but in an exceptional manner, demonstrating that local government is first and the most stable of all governments.

We have within our present state boundary cities, towns and villages which paid homage to and accepted authority from the mother state of Virginia before West Virginia, as a state, was dreamed of. The present charter of the city of Wheeling is one granted by the legislature of Virginia before the war between the states. Guyandotte celebrated her one hundredth anniversary, and was forthwith swallowed up and gulped down by her thrifty sister, Huntington. She was proud of her past, and her people loved to recite the doings of men long before and during the war. A large part of her area was sacred ground. Future progress was delayed while recounting the deeds running through a century. Guyandotte is now being rejuvenated and is an important factor in the present and future progress of her partner and ally. What is true of Wheeling and Guyandotte, in a large part, is true of other municipalities of the State. Thus it is that these old municipal governments of ours have lived and prospered under two different state governments which were, at times, adverse and hostile.

West Virginia, rich in natural resources and in the kind and worth of her citizens, is poor in the size and importance of her municipalities. The states which surround and abut upon her, point with pride to large and prosperous cities; while in West Virginia, cities having a population of over ten thousand, are few and far between. This is in part because for many years our people had taken no accounting of the state's natural resources and wealth; did not have the slightest conception of her agricultural possibilities; and did not realize the great advantages of her location as relates to the present and future business of the country. Our people were content to remain inactive while the riches from our resources helped to build the industries of nearby states and make for them large and prosperous cities, which, in a measure, count for our humiliation. The people of those states are no better endowed naturally, and neither have they more business acumen. Our lands, timber, coals, clays, oil, gas and water power, and the like, give West Virginia such a variety of natural resources that she ought to distance all competitors in the race for supremacy. These things, properly considered and developed, ought to be making big cities for us rather than for the people of other states. This must in time right itself. In fact, the turning point has been reached. Already some of our cities are infused with new life. They know and feel their natural advantages and have confidence in their ability to cope with all competitors. Their people—in fact, all the people of the state—have caught the spirit of the times. Having been slow to move, now that they are moving, the pace will be swift and certain. The valley of the Ohio

and its tributaries is becoming a beehive of industries, and soon it will be the market place of the world. This means that cities already big must and will grow larger; and that cities not yet started will spring from present-day cornfields. But are they to be cities over the border lines or to be cities within the confines of West Virginia? How are we to turn the tide our way? We cannot stay the hand of progress that pulls our natural resources into other states, there to be manufactured and perchance returned to us at greatly enhanced prices. Neither can we, if we would, build a wall around the state, by legislation or otherwise, to withhold our products, in whole or in part, from crossing the border line. The remedy is none of these. We must enter the field of competition, and our cities must compete successfully, too. With the natural resources which our State has over the other States, and which most of our cities, both present and future do have and will have over other cities, successful competition can be made certain.

So build and develop our cities that they shall offer better advantages for the investment of capital and the location of industries and the making of manhood and womanhood than the competing cities of other states. It may be asked how this is to be brought about. And what constitutes the advantages of which we speak? Shall these cities be model cities? Yes; but not dream cities, not yet rose-gardens. Neither can they be models through a self-acting form of government which has no supposed imperfections and under which no harm can be done. Fads and fancies should not be at the fore-front; for practical and every-day things go to the making of a model city as they do to a model home. Public interest, care and attention can make almost any place a model city, yet a model city is something not found in every state. Laws and natural advantages may aid, but the people make the real progress of every city. Before your prospective investor and citizen, can you point with pride to your clean and well-kept streets and alleys and to your orderly houses and clean premises thereabout; to your low death rate and generally good health statistics; to your churches with large membership and with liberal views and a broad scope of work, inside and outside the buildings, along humanitarian lines; to the schools, large and modern buildings, record-breaking attendance, modern methods and splendid results; to parks, already improved and made beautiful? If this newcomer asks to meet the "boss" of the city, can truth speak that your city knows no boss other than the people themselves; that there are no cults or family rings which hinder or proscribe the stranger when he shall have become one of you. Point to a chamber of commerce, board of trade, or some other business organization, of which business and professional men and other leading citizens are members and every one of whom is a live and moving part. If he questions the quality of the water, give him a bottle for test and analysis, confident that it is as pure as the snow; and to his inquiry concerning your fire department show him your modern apparatus and your fire laddies under perfect discipline; and of your sewerage system, say it extends to every part of the municipality. If he speaks of graft and grafting, introduce him to the "big chief" and the police officers under him, all of whom are honest and efficient and whose appointments were not procured by and not responsible to political pull. If

the tax rate is not lower than elsewhere. point to all that which you receive for your money—a dollar's worth for every dollar expended. Lay a wager with him that a knocker on the town can not be found, and that everybody is a booster; that the service of public utility corporations meets the needs of the people; that public franchises are fair to the people and likewise fair to the holders and operators thereunder; that you live and work under municipal laws made to meet the demands of the people; that your officials are honest, efficient and progressive; that your people seek and welcome men. industries and investments not to "skin" them, but to make them a part and parcel of your community for the good of all. If any city in West Virginia can well and truthfully hold out these inducements, it can double its population and wealth in a short time and there need not be fixed any limit to its future growth. Neither is it beyond the possibility of the average city in this state to possess and hold those advantages. In fact, they are simple things to be had upon the demand and persistence of the people of any community. And thus blessed, well may it be said that such is a model city, for the little details would be worked out by the same people who gave it such large proportions.

The things enumerated above are in the reach of every municipality in the state which can boast of much size. The realization of them would give a boom which would know no stopping. And they can be had for the asking, if backed with a determination to have them. The city possessed of them would need nothing other than the free advertisement which it would be sure to receive. If any municipality shall have within its grasp all these good things and still is not satisfied, it can add to its fame and make more certain its future by the accomplishment of some special reforms and improvements of great moment and some of which need be dealt with in the near future. For instance, it is nothing less than a crime against the public health and welfare to make the rivers within and bordering on the state a dumping ground for waste, filth and sewage. Since our water supplies are taken from these streams the menace to health caused thereby is already looming up as a big question; and as the population increases the danger will grow greater. This is especially true as relates to cities along the Ohio river after that river shall have become locked and dammed, thereby causing pools of dead water. Then disease and death will exact new and additional tolls. After the municipalities effected thereby shall have paid heavy penalties in life and property, they will be compelled to wake up to the importance of the question. The remedy is at hand and must be applied at sometime not far off. Why not now, before larger expenditures shall be required and greater losses suffered? The remedy against making our water courses our dump grounds is, DON'T DO IT. It is a common idea that nothing else can be done with the waste, filth and sewage. Custom has fostered that idea, for the facts do not warrant the common belief. Many of the important cities of Europe, and some few of this country, are not permitted to make nearby streams their common dumping place or receptacles for sewage. In those places sewerage systems are made to empty into pools where the solid matter is destroyed or used for fertilizer and the liquid disinfected and deodorized before being permitted to mingle with the waters of the running streams. This can now

and must soon be done by every important city within the state. It is not so big an undertaking, as any experienced civil engineer will testify, to make the necessary changes in the present sewerage systems of the average city in the state to conform with this new idea and plan; and certainly any new system or parts thereof should be constructed with this new or changed plan in mind to which it could easily be made to conform at any time. The city which leads off with this important improvement will exhibit to the country such a high degree of progressiveness and such great concern for health and sanitation that it will receive the applause and approbation of the nation. The growth and prosperity caused thereby will soon more than pay back the cost of the work.

There is still another very important undertaking for all cities which suffer from floods. Flood protection and sewer drainage in all cities of this class are so linked as to make one imperative demand. No city of importance in West Virginia can afford to be deluged by floods every few years. The damage to property and health is too great to be suffered, provided there is a remedy to prevent it; and. with few exceptions, the remedy is at hand. Huntington, Charleston, Parkersburg and many smaller municipalities can construct levees to completely protect them against inundation from water; and Wheeling can in part. This protection is within the reach of all these cities. The greatest obstacle to its accomplishment is the sewer drainage direct into the rivers, which affords conduits for the back water from rivers at flood times; another argument and good reason for the abandonment of the present plan of sewers having direct connection with the rivers. Were it not for the present mode of sewer drainage it would be within the reach of all our cities to protect their people from the ravages of floods. The levees could even be made to beautify the cities, perchance affording elegant driveways or boulevards. This is no idle dream, but is a practical question which must be met and can be coped with successfully by the city which undertakes the task in no half-hearted way. Any city resting upon the shore of the great Ohio which, in truth, first advertises to the world that it is beyond the reach of the floods, and, incidental thereto, that it has a sewer system independent of river connection, will have at one leap sprung into glory and renown. It will enjoy the benefits to be derived from that great river without making the sacrifices theretofore exacted, and its growth and prosperity will know no bounds. And yet the damages from the flood of the year 1913 will, in each of the flooded cities on the banks of the Ohio more than pay the cost of these anticipated improvements. The natural resources of West Virginia are attracting the attention of the business world. With these improvements the people of the larger cities of West Virginia would show to the world that they were capable and willing to tackle big things and bring them to a successful termination. That, in itself, would be a big advertisement which, with the actual benefits to be derived from the improvements, would attract investments, industries and men—would make the city which first accomplishes the results grow in population, riches and prosperity.

To bring about these reforms, it is necessary to stir up public discussion and arouse public interest. That can be done through the press and by

the business and civic organizations of the city. Public discussion is a wonderful tonic and once well started it feeds on itself. Likewise a little success stimulates the body politic and creates a demand for more. Public discussion and interest may discover that some new laws are needed as an aid for the accomplishment of proposed reforms. The people may decide that they want a commission form of government; and it may be good for them to have it, for a change ofttimes creates new interest and gets people out of the old rut. In the opinion of the writer the commission form of government is a decided improvement over the old councilmanic form, whether with one or two branches, until recently existing in all the cities of West Virginia and still existing in a majority of them. Commission government is a decided improvement over the old, promoting honesty, efficiency and economy. Its points of merit are: the election of a few people to office, through the short ballot, by which the fight is centered on the important offices; the division of the city government into a few departments and placing one man at the head of each, thereby holding him absolutely responsible for its running; and the non-partisan feature of nominating and electing officers. The average man will be true to his official trust when responsibility can not be dodged, but is certain and fixed, and in consequence thereof will respond readily to public demands. Huntington was first to adopt the commission plan, and Bluefield was second, both in the year 1909. Parkersburg, some two years later, and Fairmont, recently, have discarded the old and taken on the new, and Wheeling and Clarksburg are hot on the trail. And it is a safe prediction that not one of them will ever return to their discarded junk, but will move forward rather than backward. The running of a city is a business task and has no legitimate relation to politics. Elect a few good men who are willing to run the city for fair salaries and without allegiance to any political party, boss or selfish clan, and one-half the battle for honest and decent government will have been won.

In conclusion, permit the writer to state that in the preparation of this paper it has not been his purpose to deal in statistics or figures, which are usually dry and uninteresting, but that he has attempted to cover the subject, "Development of Towns and Municipal Improvements," in a general way, and with the hope that he has set forth some things worthy of consideration and which may act as a basis of action for future good. If these suggestions shall have aroused public interest and concern and shall cause a study of municipal government in West Virginia, the writer will feel amply compensated for his labors.

Church Devlopment

The Editor and Committee, unable to obtain a general treatment of this subject in a single article, decided to assign brief articles to representatives of each denomination. They were able to secure articles for five denominations which have the largest membership in the state.

THE BAPTIST DENOMINATION

By Rev. L. E. Peters.

A tradition says that the first wagon that crossed the Allegheny mountains westward, carried the goods and chattels of Elder John Alderson, who settled on the Greenbrier river, where now the town of Alderson is located, arriving some time in October, 1777. Here he opened a farm, and often plowed with his gun swung on his shoulder to protect himself from the Indians. In 1781 he organized the "Greenbrier Baptist Church," which has an unbroken history to the present day.

About the same time the Forks of Cheat Church and the Simpson Creek Church, at Bridgeport, Harrison County, were constituted; these two were planted a few years earlier than the Greenbrier Church. The dates are not definitely determined. These three church were the centers in the territory, now West Virginia, from which the denomination has grown in the state.

Up to the breaking out of the war in 1861, all the churches in that part of Virginia now West Virginia co-operated with the General Association of Virginia and were known as Virginia Baptists. At the close of the war these churches were very much dis-organized and the membership scattered, and there was no bond of denominational unity. But soon Divine grace triumphed over bitter feeling and blood-shed, and on the 15th of November, 1865, the Baptists of the state met through their representatives in Parkersburg and organized the Baptist General Association of West Virginia. Perfect harmony and brotherly love prevailed throughout the entire session of the convention, and here the Baptist denomination of West Virginia was well born. Here the history of West Virginia Baptists begins. In the limits of this sketch, I can not go into details, but shall give the development of the Denomination in the state along a few leading lines.

1. *Numerically.*—It is impossible to get a correct statistical statement of the Baptists of West Virginia at the close of the war or even when the General Association was organized in 1865. They have been estimated at about 10,000. The first statistical table published was in 1869. Then we had 274 churches with a total membership of 17,518. The total of all contributions for that year was $26,536. At the close of our last associational year—September 30, 1912—we report 649 churches, with a total membership of 53,406. The total contributions for church expenses were

$173,818.68; for benevolences, $30,511.38; grand total for all purposes, $204,351.31. While our Sunday-school work has kept pace with the churches and sometimes been in advance of them, we have no accurate published statistics. The old-time "union school" has give way to the Denominational school; the summer school has largely disappeared and the "evergreen school" is the rule. The old lessons consisting of the reading of a few chapters from the Bible has been replaced by the "Uniform Lessons," and in the last few years a splendid system of Graded Lessons is used in the lower grades.

2. *Development in Mission Work.*—The General Association was organized primarily for state mission work. This was managed by an executive board, who made the appointments, collected funds and paid the missionaries. In 1869 the board had in the field 16 missionaries who traveled 22,323 miles, preached 2,053 sermons, delivered 450 lectures and addresses, baptized 501 persons, 200 of whom were baptized by one missionary, Rev. C. J. Rippetoe, held 450 prayer meetings and visited 24,468 families. Now, for the year ending September 30, 1912, we employed 44 Missionaries who performed 1,360 weeks of labor, delivered 4,616 sermons and addresses, made 15,119 family visits, reported 553 conversions and 373 baptisms, and traveled 55,537 miles. The first missionaries were appointed by the state board in 1866, seven men to labor in eight counties, at a total salary of $1,170. Mission work outside of the state in these days consisted largely in resolutions and speeches. The first record we find of contributions was in 1866, as follows: For home missions (North America) $6.50; foreign missions, $103.00. The records of 1912 show contributions for home missions, $5,357.30; for foreign missions, $6,688.69; for Sunday-school and colporter work, $2,707.98; for state missions, $15,161.26. In the prosecution of the state mission work, in addition to the 44 missionaries given above, the state board employs a general secretary, and two general missionaries, one in the northern and the other in the southern part of the state. $308.05 was contributed last year for church edifice work.

3. *Development in Denominational Education.*

(1) *Schools.* The Baptists of "Western Virginia" some two or three years before the war bought the property of Blue Sulphur Springs and opened a school that started off under the name of Allegheny College, with fine prospects. At the beginning of the war of 61 it was closed, and in time of the war the buildings were destroyed by the Federal Army. Effort has been made to recover damages from the Government, but so far has failed. The managers paid off the entire debt against the property during the war in Confederate money, which after the war the courts decided was not a "legal tender" and the denomination lost the entire property. This school gave to the Baptists of West Virginia its two greatest preachers, Dr. W. P Walker and Dr. J. W. Carter. Before the war Dr. Wheeler started Rector College at Pruntytown in Taylor county, but the buildings were destroyed by fire and this ended its career. After the war Rev. J. B. Solomon came from Virginia and started a school and claimed for it a "regular university" course, but he was elected to a professorship in the State University, and that school was not. In 1869 Baylus Cade, a brilliant

and enthusiastic student from Richmond College came to West Virginia and established Coals Mouth High School. Prof. P. B. Reynolds was its first principal. It was finally changed to Shelton College in honor of its largest donor, Mr. Matthew Shelton. While this school was short lived for want of funds, patronage and proper appreciation, yet it did a great deal of good in discovering talented young men and giving them a start and taste for learning. Some of them now fill prominent positions as educators and preachers.

About 1877 Rev. E. J. Willis moved Broaddus Female College from Winchester, Va., to Clarksburg, where it had a varied experience, but did much good work and sent out a goodly number of well-trained young women in the state. It was reorganized and stripped of its title as a college and has ever since been known as Broaddus Institute. It changed administration about every two or three years. The buildings were enlarged and the attendance grew, it being now a mixed school. As the town grew it was hemmed in and demanded a better site. An offer was made to move it to Philippi, which was accepted. It now has on "Battle Hill" a splendid up-to-date plant and is doing good work under Prof. Elkanah Hulley, an experienced educator. Alderson Academy at Alderson, in Greenbrier county was organized a few years ago, and has had several very successful sessions. It is now erecting an up-to-date building.

(2) *Ministerial Education.*—In 1865 I doubt whether there was a college and seminary graduate in the Baptist clergy of the state, but now we have scores of them. There was not much done in an organized effort along this line until 1891, when Rev. John S. Stump, D.D., of Parkersburg, organized a State Education Society. It is incorporated under the laws of the state in the form of a joint stock company. Mr. Jarrett Linch, of Monongalia county, left a handsome nucleus of an endowment in his will to the society. The proceeds of this endowment, annually supplemented by the contributions from our churches, put the society in good condition to help young men called to the ministry. This year we are assisting 23 students at a cost of $2,150.00. For the improvement of our present ministry, we have a state Minister's Fraternal Union with 42 members.

4. *Other Movements.*—Women's missionary circles, young people's societies, twenty district associations, nineteen Sunday-school Conventions and an annual summer assembly keep our forces in line and at the work.

5. *Changes in the personnel of our Ministry.*—The old pioneers who laid broad and deep the foundations of our denominational life in the state have gone to their reward. Strong, self-made, godly men they were. My heart longs to give a sketch of them, but my space forbids. Now we have a fine class of men, cultured and able preachers, such as Brinenstool of Wheeling, Bennett of Sistersville, Smith, Hank, Stump, Moore and Bartlett of Parkersburg, Wood of Huntington, Johnson, Binford and Bayles of Charleston, Powell of Grafton, Eddy of Fairmont, and Briggs of Morgantown, Taylor of Clarksburg, Woofter of Salem and scores of others I might mention. The three greatest preachers in the state among the old men were Dr. W. P. Walker, Dr. J. W. Carter, gone to heaven, and Jonathan Smith, who is still living.

METHODISM IN WEST VIRGINIA

By William B. Mathews, Clerk of the Supreme Court of West Virginia.

Methodism has never been slow in following the pioneer into a new country. Her church polity and the genius of her institutions have been such that she has kept pace with man's migrations even when he has wandered into remote regions. The "circuit rider" in his long and weary rounds in early days did not overlook the sparsely settled communities. As a result, that church was firmly planted throughout our entire borders, and has kept pace with the wonderful growth and development of our great State.

Wesleyan preachers did not begin systematic work or hold their first conference in America until 1773, although Wesleyan societies were organized in New York and Philadelphia a few years before that time. Previous to that year, settlements were made within the present boundaries of West Virginia, at Shepherdstown and other points in the eastern panhandle, Lewisburg, Morgantown, Wheeling, Clarksburg, Moundsville, and Brownstown, now Marmet, near Charleston. The first Methodist preaching on West Virginia soil was probably in the Shenandoah Valley as early as 1775, only twelve years after the Methodists first became a factor in the religious life of America, and nine years before the Methodist-Episcopal Church was organized. In that year John Haggerty and Richard Owings preached at the home of Major Lewis Stephens, son of a pioneer settler in the territory which afterwards became Berkeley and Jefferson counties. A "class" was formed, and the first Methodists within our bounds were its members; the Stephens family, John Hite and sister, Mrs. Elizabeth Hughes, and John Taylor and wife.
William McKendree and Enoch George, all of whom afterwards were elected bishops of the church. John Tunnell, James O'Kelly and Francis Poythress, men of note, were itinerants in that territory.

The people called Methodists followed Braddock's road and penetrated the wilderness to the Monongahela at Redstone Creek, where Brownstown, Pa., now stands, but instead of defeat they won many victories in extending the Kingdom of God. Redstone circuit, embracing the whole Monongahela Valley, was formed in 1784, the year the Methodist Episcopal Church was organized. John Cooper and Samuel Breeze were the first pastors. In 1785, Peter Moriarty, John Fidler and Wilson Lee were appointed

In 1778, Berkeley Circuit, covering that territory was formed, with Rev. Edward Bailey the first regularly appointed Methodist pastor in West Virginia. Next, Methodism entered the Greenbrier Valley, covered by the Allegheny Circuit, organized in 1783, and later by the Greenbrier Circuit, organized in 1787. Rehoboth Church, at the "Sinks of Greenbrier," near Union, completed in 1786, and still standing, is said to be the oldest Methodist Church west of the Alleghenies. Bishop Asbury preached daily in this church, when he held the annual conference May 21-24, 1792, at the cabin of Edward Keenan, near by. The annual conference of 1793 was also held there in May of that year.
Among the presiding elders of that region were Richard Whatcoat,

pastors, and Lee carried his ministrations through the wilderness as far as Wheeling, where a "class" was formed with Mrs. Elizabeth (McCulloch) Zane, as probably the first member. The work so rapidly developed that in 1787 Ohio circuit, embracing a large territory along and east of the Ohio River, was formed, and Charles Conaway and George Callahan were its first pastors.

Methodist "societies" rapidly multiplied. Clarksburg circuit was formed out of Redstone in 1787, with Robert Cann and Richard Pearson as pastors. Randolph circuit on the upper tributaries of Tygart's Valley and Cheat Rivers was formed in 1790, Anthony Banning, pastor. In the same year Kanawha circuit was formed and preachers assigned, but as no reports were made it is probable the work was not taken up at that time, and the statement in Atkinson's History of Kanawha county is correct that Rev. Wm. Steel of the Little Kanawha circuit preached the first Methodist sermon in Charleston on January 1, 1804. The latter circuit was created in 1779, with Robert Manley, the first pastor.

The large Guyandotte circuit embracing settlements along the Ohio and as far up the Guyandotte and Great Kanawha Valleys as white men could be found was formed in 1804, Rev. Asa Shinn, one of the founders of the Methodist Protestant Church, being the first pastor. The organization at Charleston was probably effected in 1815, by H. B. Bascom, afterwards a bishop in the Church South.

The progress of Methodism in West Virginia for the first two decades, as reported by the official minutes, is as follows:

Year.	Number of Preachers.	Membership.	
		White.	Colored.
1780	3	205	...
1790	7	1,472	130
1800	10	1,636	66

Bishop Asbury.

Thus was accomplished the beginnings of Methodism in the latter years of the Eighteenth Century within the limits of the State of West Virginia. At that time it was only a wilderness. No one can record the privations and heroism of the pioneer preachers who achieved that work so comprehensively, planting the church in every part of our territory. Bishop Asbury, who, with Bishop Coke was the general superintendent of the church, evidently regarded the hills and valleys of Western Virginia as his especial diocese. He showed his devotion to it by making it frequent visits, nearly every year from 1789 to 1816, the year of his death. He states in his Journal:

"I have frequently skimmed along the frontiers for four or five hundred miles from Kentucky to Greenbrier, on the very edge of the wilderness, and thence along Tiger's (Tygart's) valley to Clarksburg and on to the Ohio. These places, if not the haunts of savage men, yet abound with wild beasts. . * * * The people cannot tell what I have to cope with. I make no doubt the Methodists are, and will be, a numerous and wealthy

people, and their preachers who follow us will not know our struggles but by comparing their improved state of the country with what it was in our days."

Bishop Asbury labored with incessant and unflinching zeal. He preached daily. On account of his military bearing he has been called the Field Marshal of Methodism, but his Christian affability and knowledge of human nature gave to him such a genius for organization that, without the advantage of inherited church affiliations on the part of the people, he built so firmly, and laid foundations so far reaching that the Methodist bodies today constitute by far the largest number of communicants of any ecclesiastical family in the state.

Portions of our territory have belonged to the Virginia conference, the Western conference, and the Kentucky conference. In 1825, after the Pittsburgh conference was formed, this territory was divided among the Pittsburgh, Baltimore and Ohio conferences, and in that year, there were within our bounds 22 circuits, 32 preachers, and 10,405 members, of whom 523 were colored.

A detailed account of the growth and development of this great religious denomination, with historical accounts of the facts leading up to the separation of 1828 which resulted in the Methodist Protestant Church and that of 1844 which resulted in the Methodist Episcopal Church South, are necessarily precluded from the limits of a brief article. It is sufficient to say that all parties to these differences were sincere and conscientious, and that at the present time no differences are apparent to prevent a reunion of these aggressive forces in the church militant.

Potent Factor for the New State.

West Virginia being the border land between the North and the South, it was inevitable that feeling should be intense and partisanship at white heat. The ministry of the Methodist Episcopal Church, led by the great mind of Gordon Battelle, were solidly against slavery and in favor of the creation of a new state, and likewise almost the entire rank and file of the laity of that church, led by Arthur I. Boreman, Waitman T. Wiley, Chester D. Hubbard, James C. McGrew and many others. The influence of the circuit riders among the people as they traversed these mountains and valleys just preceding the outbreak of the war, constituting themselves missionaries of freedom, both in and out of the pulpit, can hardly be estimated. It certainly went far, and probably was the controlling factor in causing the western counties of Virginia to remain loyal to the Union, and in time to become one of the sisterhood of States. Many of the number left their pulpits and went to the front to advocate their principles in the final arbitrament of arms.

The West (formerly called Western) Virginia Conference was organized in 1848. Its rapid growth may be seen at a glance from the following official statistics for the years named:

Year.	Ministers.	Members.	Value of Property.
1850	54	14,201	Not reported
1875	159	31,413	$ 605,455
1900	226	54,892	1,188,715
1912	290	69,886	3,087,674

ber of colored congregations belonging to the Washington Conference.

Besides the above, there are a number of churches in West Virginia belonging to the Pittsburgh and Baltimore Conferences, and a large num-

West Virginia Wesleyan.

One of the greatest achievements of the West Virginia Conference is the establishment of a successful Christian college. The West Virginia Conference Seminary, Buckhannon, was opened Sept. 3, 1890, with Dr. W. B. Hutchinson as president. Many cities had sought to be the site of the school but Buckhannon was chosen because of its central location, its high moral tone, its inexpensive living and its beauty and healthfulness. In 1903 its faculty and curricula were enlarged and the institution was chartered as the West Virginia Wesleyan College. Its standard of scholarship has always been high.

Although founded and chiefly supported by the Methodists, the college is wholly undenominational. No religious tests are prescribed upon trustees, faculty or students, though the school has always been noted for its high Christian influence. It has emphasized the belief that education should include character forming as well as scholarship.

Commencing with a barren field in 1890, the college now has a well-wooded and beautiful campus of 43 acres, on which are seven buildings: (1) College Hall, (2) Woman's Hall, (3) Music Hall, (4) Gymnasium, (5) Haymond Science Hall, (6) Heating Plant, and (7) President's Residence. Its assets exceed $400,000. It has a library of 7,000 volumes, well equipped laboratories and other facilities for the best instruction. Courses are given in the College of Liberal Arts, leading to the degrees of Bachelor of Arts and Bachelor of Science. It has a preparatory school, a department of music, of commerce, of art, of oratory and a flourishing normal school.

In February, 1905, a fire destroyed the main building; but College Hall, larger and better was immediately errected to take its place.

The school has always been well attended by students from West Virginia and other states; but during the past five years the enrollment has shown a steady and continuous increase—as the figures indicate: 1909, 373; 1910, 423; 1911, 475; 1912, 507; 1913, 528. The students of strictly college rank have quadrupled in the last four years.

The faculty consists of twenty-eight persons, with President Carl Gregg Doney, at the head. They are graduates of good universities or colleges, and technical schools. The thirty-six trustees are representative men and women of the state. Though young, the alumni include two state officials, twenty school principals and superintendents, over one hundred men teachers, eighty ministers, thirty lawyers and leading men and women in all the honorable walks of life.

The college has been of inestimable value to West Virginia and its growing strength is promise of still greater service.

Methodist Protestant Church*

The history of Methodism is one until 1828, when what is now known as the Methodist Protestant Church was organized. The reasons for the division were the refusal of the election of presiding elders, refusal of the right of appeal and representation for local ministers and laymen, by vote of Bishops McKendree and Soule in 1820.

The publication of a paper known as Mutual Rights, edited by Rev. Asa Shinn, lent color to the situation surrounding the general movement for lay representation at this time in Methodism.

The first Methodist minister to be expelled for advocating the reading of this journal was D. B. Dorsey, who spent a part of his life at Wheeling, West Virginia, and his declining years at Fairmont. Among the active and conspicuous figures in the early history of the formation of West Virginia was Francis H. Pierpont, the provisional governor, who was an active lay member of the Methodist Protestant Church, and represented it as a delegate from the Pittsburgh Conference in the general conference of 1846, 1858 and 1871, at which conference he was elected President, being the first and only layman ever to serve as President of a general conference of Methodists. In 1875 he was commissioned as one of the nine members on church union, to meet with the southern division of the Methodist Protestant Church, and in 1877 was a member of the conference that united the two divisions.

The first Methodist Protestant church organized in the State of West Virginia was at Hackers Creek, in Lewis County, October, 1829, by Rev. John Mitchell and David Smith, and is known as Old Harmony Church. The building was erected in October, 1819, and is still preserved. Rev. H. K. Bonner was elected class leader. The next society was organized at the forks of Hackers Creek. Rev. John Smith was elected leader. In 1830 a class was organized at Morgantown by Rev. Cornelius Springer, a veteran of the war of 1812, and a participant in the division discussions of 1820 to 1830. This class produced three prominent ministers, Joseph A. Shackleford, Asby Pool and John Clark. The same year Springer and Marshall formed a society at the forks of Cheat river. In February of the same year, Rev. George Brown formed societies in Palatine near the home of the late William Barnes. Societies were also formed at Pruntytown and Rockford. Rev. George Nestor in the same year made organizations at Harrisville, Morristown and on Teter Creek in Barbour County. There were also organizations formed in the Greenbrier Valley, and at Flatwoods in Braxton County.

The West Virginia conference was set off from the Pittsburgh Conference with 3,000 members and P. T. Laishley appointed President, and organized October 2, 1885, at Pruntytown. Rev. P. T. Laishley was a representative from Monongalia county, and also chaplain, in the first convention at Wheeling, in May, 1861. He and other Methodist Protestants were active in the formation of the State.

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*Acknowledgment is made to Hon. A. D. Williams for statements relative to the Methodist Protestant Church, of which he is a prominent member.

The church has at present in the state 78 ministers and 70 charges. besides those included in the Pittsburgh and Baltimore conference; a membership of 17,092, church property valued at $455,091; 264 Sunday Schools, with 18,000 endrollment. The present officers of the conference are President, Rev. J. N. Holt, Colfax, W. Va.; Secretaries, J. H. Mossburg, Flemington, W. Va., W. H. Hodges, Morgantown, W. Va.

Methodist Episcopal Church South.

The Methodist Episcopal Church South was organized pursuant to the plan of separation adopted by the General Conference of 1844, at a convention of duly elected delegates from the southern conferences, which met at Louisville, Ky., in May, 1845. With great unanimity this convention declared a separation was necessary in order to save to Methodism its members in the South. A general conference was appointed to meet in May, 1846, and every four years thereafter, so that the general conference of the two Episcopal Methodisms alternate, convening two years apart.

The Western Virginia Conference of the Church South was organized at Malden in 1850. At the time of its organization it had 24 charges with an aggregate membership of 5,293. After the separation the southern churches in western Virginian territory had been placed under the care of the Kentucky conference, and constituted the Parkersburg, Greenbrier and Guyandotte districts thereof. In 1860 there were five districts, 60 effective preachers, 93 local preachers, 12,694 members and 126 churches and 9 parsonages, valued at $114,100.

No sessions of this conference were held on account of the war from 1860 until 1866. The members of this body stood staunchly for their political principles and like true Methodists endured hardships and the dangers incident to a sanguinary struggle with fortitude and self-sacrifice. Only about one-third of the former members of the conference answer to the "sad roll call" at Greenup, Ky., Feb. 22, 1866. Bishop Kavanaugh, who preached in the Great Kanawha Valley when a young man, presided. From that time, the growth of this branch of Methodism has been rapid. Great good has been accomplished by it among the West Virginia hills, although its beneficent jurisdiction extends also into Kentucky. In 1912 there were reported 114 preachers, 27,512 members and church property valued at $1,208,940. A number of the pastoral charges of the Baltimore Conference, South, are located in this State.

Morris Harvey College.

Previous to the war, Marshall College was under control of this Conference, but the institution was not re-opened after its close, and the property was disposed of to the State for use as a Normal School. However, when the county seat of Cabell County was removed from Barboursville to Huntington the county buildings at the former place were secured, mainly through the efforts of Dr. T. S. Wade, of honored memory, and thus was established Barboursville Academy, now Morris Harvey College.

This institution was incorporated as the Barboursville Seminary, May 16, 1888. One year later it was accepted by the Western Virginia Annual Conference, M. E. Church, South, and operated as the Barboursville College. By this name it was known until May 27, 1901, when, in consideration of the beneficence of Mr. Morris Harvey, in the gift of several thousand dollars to the school, the Board of Trustees thereof changed the name to Morris Harvey College.

The buildings consist of an Administration Building, Rosa Harvey Hall for girls, a Music Hall and Billingsley Hall for boys. Its present faculty consists of eight members, headed by President R. H. Alderman, and it has a student body of nearly two hundred.

Comparative Statistics.

A U. S. census bulletin gives the following figures relative to church membership in West Virginia for the year 1906, and it is probable that the ratios indicated therein practically remain the same. The totals, however, are below the actual number of members, since some 800 church organizations failed to report.

The census gave for 1906 a membership of 115.825 in all Methodist bodies in the state, distributed as follows:

Denominations.	Members.
Methodist Episcopal	61,641
Methodist Episcopal, South	36,632
Methodist Protestant	16,004
African Methodist Episcopal	1,002
Wesleyan Methodist	238
Free Methodist	150
African Methodist Episcopal, Zion	86
Colored Methodist Episcopal	72
Total	115,825

The same bulletin gives a further table, showing that the Methodist bodies had, in that year, over 38 per centum of the entire church membership reported in the state. This table contains the following statistical presentation:

Bodies.	Members.	Per Cent.
Methodist Bodies	115,825	38.5
Baptist Bodies	67,044	22.2
United Brethren Bodies	19,993	6.6
Presbyterian Bodies	19,668	6.5
Disciples or Christians	13 323	4.4
Lutheran Bodies	6,506	2.2
Protestant Episcopal Church	5,230	1.7
Reformed Bodies	886	0.3
Congregationalists	228	0.1
Other Protestant Bodies	11,101	3 6
Total Protestant Bodies	259,804	86.1
Roman Catholic Church	40,011	13.3
Latter Day Saints	1,385	0.5
All other bodies	365	0.1
Grand Totals	301,565	100

Of the above number, there were about three males to every four females. There were 3428 church edifices reported with a seating capacity to accommodate nearly the entire population of the State at one and the same time. The value of church property nearly reached $12,000,000. There were 3486 West Virginia Sunday Schools reported with 27,577 teachers and 212,577 scholars.

In all this equipment for promoting religious and civic righteousness in our fair State, Methodism has had an honorable part in the past, is willing to cooperate in bearing the burdens and responsibilities of the present, and looks to the future with enthusiastic faith and hope that our commonwealth as it becomes greater and more prosperous may likewise become better and more righteous.

THE PRESBYTERIAN CHURCH

By Rev. Dr. James H. Flanagan, Grafton.

According to the history of the Presbyterian Church given by Ogilvie, "There are in America 13 organizations of the Presbyterian and Reformed Order, holding to the Calvinistic system of doctrine. They may be divided into three general classes: (1) those which sprang into existence independently on American soil; (2) those that were planted as branches of the Reformed Churches of the Continent, and continued for some time in organic connection with these churches; (3) those which were organized as branches of the Scottish churches, and were long in affiliation with their Scottish parent churches. Of these the first to enter the continent in order of time was the Dutch Reformed. Next came the Scotch and Scotch-Irish population, which, combining with the Presbyterian element within English Puritanism that had found its way into New England, sprang into the strictly so-called Presbyterian Church in the United States of America."

The church of the Presbyterian faith became a permanent organization whose influence early began to be felt in the land. At a meeting of the General Synod in 1758 the resolution was adopted that the Synods of New York and New Jersey, Philadelphia, Virginia and the Carolinas be created out of the General Synod. In 1802 the resolution was adopted that the Presbyterians of Hanover, Lexington and Winchester be constituted a synod to be known as the Synod of Virginia, that the Presbyteries of Redstone, Ohio, and Erie be constituted a synod to be known by the name of the Synod of Pittsburgh, and that the southern boundary of the Synod of Pittsburgh be from the mouth of the Scioto up the Ohio River to the mouth of the Great Kanawha, thence a line due east to the top of the Allegheny mountains. This surrounding was such as to build up the Presbyterian Church in the territory of West Virginia. The Synod of Virginia was to develop denominational interest in the southern part of Western Virginia, and the Synod of Pittsburgh was to look after the northern portion. The Presbytery of Redstone was very careful in looking after points where a church organization could be planted. Dr. Power, Dr.

Fairchild and Dr. Stoneroad were faithful in their care of Morgantown Fairmont, Clarksburg, French Creek and other points. From such careful attention on the southeast, southwest and northern portion, many churches were built up in Western Virginia. From these sections came those who settled in Western Virginia, and who built up the churches that were scattered here and there throughout the territory.

At the outbreak of the Civil War in 1861, almost the entire body of the Southern Presbyterian Church withdrew their connection from the old General Assembly, and united with the organization of the General Assembly of the Presbyterian church in the Confederate States of America. The organization was effected at Augusta, Georgia, December 4, 1861. The second Assembly convened at Montgomery, Alabama, May 1, 1862, since when the meetings have been held at the same time as the meetings of the northern portion of the church. At the separation, it called upon the original body to make some arrangements with regard to the ministers and churches still remaining in connection with the northern General Assembly. It was a question that required some thought and planning. "What shall be done with them?"

At the meeting of the General Assembly of the church in session at Peoria, Illinois, in 1863, the following resolution was adopted, viz.: "That it be recommended that all the ministers in West Virginia south of the southern line of Pennsylvania extended to the Ohio river be detached from their Presbyteries, and formed into a new Presbytery to be called the Presbytery of West Virginia, to meet at Parkersburg on the 1st Tuesday of October next at ten o'clock A. M. to be opened with a sermon by Rev. H. W. Biggs, and that the Presbytery be attached to the Synod of Wheeling. On that day the Presbytery of West Virginia was organized with a distinctive work with regard to the State of West Virginia. It was admitted that this seemed like a large work handed over to a very few men. But with the determination to follow out the direction of the General Assembly the Presbytery of West Virginia was organized. At its organization, it was said by one of the youngest members: "Let us grasp the opportunity that is ours, and do the best we can, and, by the blessing of God, sometime in the future we will see not only a Presbytery, but a Synod of West Virginia." The action of the General Assembly tended to draw the lines between the southern and northern elements more distinctly in the bounds of the state. From that time forth the two parties have remained distinctly separate. To give the Presbyterian Church of the state its proper standing, both parties must be considered. The southern church in West Virginia consists of Greenbrier and Kanawha Presbyteries, with some churches in the Winchester Presbytery.

At the first meeting of the Presbytery of West Virginia the following statistics were reported:

Ministers, 5; members, 442; funds, benevolence, $129; congregational, $1,200. The work went on until the Presbytery of West Virginia had grown sufficiently to be divided into two Presbyteries. By action of the General Assembly at Buffalo, New York, May 28, 1902, the following resolution was adopted, viz.:

"We recommend that the Presbytery of Washington be and hereby is divided on the state line, and that those ministers and churches which now belong to the Presbytery of Washington that are in the bounds of the state of West Virginia constitute the Presbytery of Wheeling; that the Synod of West Virginia be and hereby is erected, to consist of the Presbyteries of Wheeling, Grafton and Parkersburg."

According to the direction of the General Assembly the Synod of West Virginia was organized October 18, 1904. In comparing the statistical report of 1912 with that of 1863, it shows that much growth has been made in the church. The report of 1912 was: members, 2,546; benevolence $34,809; congregational funds, $105,775. Greenbrier Presbytery reported in 1912: members, 3,076; benevolence, $14,358; pastors funds, $12,669. Kanawha Presbytery reported: members, 3,268; benevolence, $14,375; pastors funds, $12,855.

The Presbyterian Church is very proud of Davis and Elkins College. This college was organized by the southern branch of the church, but since the organization of the Synod of West Virginia, composed of the northern churches, the two branches of the church have been united in the work and fellowship of the institution.

The work of the Presbyterian church is moving on in a very prosperous way year by year, and is exerting an influence for good.

THE PROTESTANT EPISCOPAL CHURCH IN WEST VIRGINIA

By George W. Peterkin, Bishop of West Virginia.

The Protestant Episcopal Church in West Virginia was a part of that Church in the State of Virginia from May, 1607—the date when Rev. Robert Hunt of the Church of England held his first service at Jamestown—until October, 1877, at which time West Virginia was formally set apart as a separate Diocese. How soon this church began to acquire a hold upon that mostly uninhabited and, at the best, sparsely settled territory is not known, save that we have a list of nine clergymen who labored in what is now West Virginia from 1700 to 1785.

In the convention of the Protestant Episcopal Church of 175, in Richmond, Va., we have the first notice of any delegate from West Virginia, and such attendance of clergy and laity was regularly kept up until 1877, when, for the last time, the original undivided Diocese of Virginia met in Staunton. During that time (ninety two years) Bishops Madison, Moore, Meade, Johns and Whittle lived and labored.

The membership of churches, and ministers, rose very slowly. In 1842 the clergy, in what is now West Virginia, numbered six; in 1853 there were thirteen and 636 communicants. In 1877 there were 15 clergy and 1,033 communicants.

Subsequent development will be noticed, but it is important now to mention some of the causes for the slow start in growth which this church made.

The Episcopal Church of Virginia commenced with the first settlement of the first colony in Jamestown, Va., 1607, but she had to labor under great disadvantages during nearly the whole period of her early existence, on account of her connection with the Government and the Church of England. America was, in early days, largely settled by those who, from various causes, had left, or were leaving, the church of England—the church of their fathers. In asserting the cause of popular rights and liberties against the crown, in the times of Elizabeth (1859-1603) James I. (1603-1625) and Charles I. (1625-1649), owing to the connection of church and state, many persons came to look upon the established church as their enemy, and to make it equally with the state, the objects of their assaults, and this is not strange, for the great principles of religious liberty were not at the time understood, either by those who remained in the Church of England, or by those who left her fold. The Bishop of London was in charge of the church in Virginia, but his superintendence was of necessity only nominal. And so for about one hundred and eighty years did the Episcopal Church in Virginia, as elsewhere in the country, try the experiment of a system whose constitution required such a head as a Bishop, but which was actually without it. So she everywhere suffered for lack of this office, so indispensable to the most important parts of her ecclesiastical administration and discipline.

The clergy necessarily came from England, for there was no Bishop here to confirm and ordain, and so. as the Revolution approached, dissatisfaction with the mother country grew, and with it, naturally, dissatisfaction with the mother church. Since the clergy came from England, many of them very naturally showed attachment to the King, and this subjected the church to suspicion; and this. notwithstanding the fact that the prominent laity in the state, churchmen as they were—the Washingtons and the Lees and Henrys and Pendletons and Masons and Nelsons and Meades and Mercers and Harrisons and Randolphs—were also ardent patriots. This state of things was common throughout the country, as out of 55 signers of the Declaration of Independence 35 were Episcopalians. So it came to pass that, whereas, when the Revolutionary war began, Virginia, in her sixty-one counties contained ninety-five parishes, one hundred and sixty-four churches and chapels and ninety-one clergymen. she came out of the war with a large number of her churches destroyed, twenty-three of her parishes extinct, and thirty-four more destitute of all service, while only twenty-eight out of ninety-one clergy remained, and they subject to the suspicion of which we have spoken.

In 1790 Dr. Madison was consecrated in England as Bishop of Virginia, and the church began at length to spread, as we shall try to show, through that part of the old state now known as West Virginia. Owing to the great extent of territory and the imperfect means of communication, it was, time and again, in the interest of a better supervision, proposed to divide the Diocese—in 1821, 1851, 1865, 1872, 1873, 1874 and 1876. Finally, in 1877, it was accomplished. At that time there were 13 clergy, 1,048 communicants, 22 churches and chapels and 10 rectories. In 1890, 13 years after the division, there were 23 clergy, 2,929 communicants, 56 churches and chapels and 23 rectories. In 1900 there were 34 clergy, 4,175 com-

municants, 67 churches and chapels and 26 rectories and in 1913 there were 41 clergy, 6,067 communicants, 95 churches and chapels and 10 rectories. The money raised for all purposes has increased from $10,000 in 1878 to $100,000 annually. The Diocese has under its control two hospitals, caring for about 1,800 patients annually, more than half of whom are practically free. During all this time the state has increased from 600,000 to 1,220,000 in population. Bishop George W. Peterkin has been in charge of this work since May, 1878, when it was started on its independent existence, and since 1899 has been assisted by Bishop W. L. Gravatt. The growth of the church during the period spoken of has been encouraging, but there are still 17 counties where we have no church—two in what we call the Eastern Convention, eight in the Northwestern Convention and seven in the Kanawha Convention.

During these years of independent existence, there have been confirmed 8,287 persons in the diocese, 47 ordained to the sacred ministry and 73 churches consecrated. The Episcopal Church, though small in numbers, is well represented in all sections of the state, especially in the large cities and towns.

THE CATHOLIC CHURCH

By Rev. Father Edward E. Weber, Chancellor of the Diocese.

The Diocese of Wheeling comprises the State of West Virginia except the following counties, which are in the Diocese of Richmond: Pendleton, Grant, Mineral, Hardy, Hampshire, Morgan, Berkeley and Jefferson. It also includes the following counties of Virginia: Lee, Scott, Wise, Dickinson, Buchanan, Washington, Russell, Grayson, Smyth, Tazewell, Carroll, Wythe, Bland, Floyd, Pulaski, Montgomery, Giles, and a portion of Craig. In territory it comprises a total of 29,172 square miles of which 21,255 are in West Virginia, and 7,817 are in Virginia.

The Diocese was formed from the Diocese of Richmond by Apostolic letters dated 23 July, 1850. The Rt. Rev. Richard Whelan, D. D., at that time Bishop of Richmond was transferred to Wheeling as the first bishop of the newly-created see. He had been consecrated the second Bishop of Richmond, 21 March, 1841. The earliest record preserved in the Wheeling Chancery sets forth that Rev. Francis Rolf was appointed pastor of Wheeling in 1829. He records a baptism performed by him on 3 November, 1828. There is evidence of a priest having visited Wheeling at an earlier date. Wheeling was established as a town in 1795, and one vague tradition has it that it took its name from a certain Father Whelan, a Catholic priest, who came occasionally to minister to the spiritual wants of the members of his flock. The western part of Virginia, which in 1863 became the State of West Virginia, had never many Catholics settlers, nor does it appear to have had many professing any religion. In 1912 the Catholic population was estimated at about 50,000 and the total population at 1,000,000. A letter preserved in the archives of the Diocese

of Wheeling dated Baltimore, 13 April, 1832 and signed James Whitefield, Archbishop of Baltimore, states the inability of securing a priest to be stationed at Wheeling, but the letter goes on: "I desired the priest who attends a congregation, on the way to Wheeling, about 40 miles on this side (Brownsville if I remember), to go and give Church once or twice a month.—He seems to say that he would comply, as far as he could, with my wish".

From Feb., 1833, to Jan., 1844, Rev James Hoerner was in charge of the Catholics in the Wheeling district. He was succeeded by Rev. Eugene Comeford, who was in Wheling till the arrival of Rt. Rev. Richard Whelan, Bishop of Richmond, in Nov., 1846. The bishop took charge of the missionary work in the Wheeling portion of the Richmond See till he was transferred as the first Bishop of the new Diocese of Wheeling. The zeal of Bishop Whelan in labouring under the most difficult and trying circumstances for a period of twenty-four years is still remembered by many of the faithful, and often referred to as a striking example of genuine saintly piety. He did much manual labor in addition to the other duties of his episcopal office. The present Wheeling cathedral was planned by him, and built under his supervision. He was architect and supervisor, and did much of the actual work in building the edifice. He also established a seminary of which he took personal charge, and some of the priests who were educated by him are still labouring in the Diocese. St. Vincent's College for laymen was also instituted under his auspices. Bishop Whelan had among his self-sacrificing clergy one especially conspicuous for his saintly life, the late Very Rev. H. F. Parke, V. G. This servant of God met a tragic death by being crushed under the ruins of a falling building 9 April, 1895. Bishop Whelan (d. 7 July, 1874) was succeeded by the Rt. Rev. John Joseph Kain, D. D., who was consecrated the second Bishop of Wheeling 23 May 1875. In 1893 Bishop Kain was appointed coadjutor to the Archbishop of St. Louis, Missouri, and became archbishop of that see, 21 May, 1895. He died on 13 Oct., 1903. During the eighteen years of Bishop Kain's administration, the work, so well begun by his able predecessor, was continued and made rapid progress. He was consecrated at the age of thirty-four and devoted his talents and energy to the increase of clergy, the establishing of new missions, and the building of churches and parochial schools, so that, at the time of his transfer, the diocese was well established although it was still greatly in need of priests, about thirty-five of whom covered an area of 29,172 square miles. The Catholics were much scattered and there were but few points at which the necessary support of a pastor could be obtained.

Rt. Rev. P. J. Donahue, D. D., was consecrated the third Bishop of Wheeling, 8 April, 1894. At the time of his appointment he was rector of the cathedral at Baltimore. During the nineteen years of Bishop Donahue's administration the number of clergy has been doubled, many new missions established, and the following institutes founded in the diocese: Home of the Good Shepherd, situated near Wheeling, where two hundred wayward and homeless girls are provided for—the sisters in charge conduct a large laundry and sewing school; The Manual Training School, near Elm Grove, W. Va. six miles east of Wheeling conducted

by the Xaverian Brothers, and St. Edward's Preparatory College, Huntington, W. Va., in charge of the secular clergy of the diocese, of which the Rev. John W. Werninger is the first president. Besides these institutions two large additions have been built to the Wheeling Hospital, and a new orphanage for boys at Elm Grove, W. Va. a large addition to St. Vincent's Home Elm Grove, W. Va. and St. Joseph's Hospital at Parkersburg, W. Va., and St. Marys Hospital at Clarksburg, W. Va., have been erected. Prior to 1895 there was one religious order of priests, the Capuchin Fathers, and three religious orders of women, the Sisters of St. Joseph, Visitation Sisters, and the Sisters of Divine Providence, Pittsburg. Since then, the Marist and the Benedictine Fathers have been introduced as also the Good Shepherd Sisters, Sisters of St. Francis, the Felician Sisters, Sisters of the Pious Society of Missions, Carmelite Nuns and the Sisters of Divine Providence of Kentucky. There are academies for girls at Mt. de Chantal (near Wheeling), Parkersburg Wytheville, Wheeling, and Clarksburg. There is a Catholic high school at Wheeling and there are 16 parochial schools in the diocese.

Development of Medical Practice and Public Health

By Dr. Charles A. Wingerter, Wheeling, W. Va.

The task put before the historian is the presentation of the thing as it was. It is the function of history to present to an on-looker the outward thing, and to show the reader as much as a spectator would have seen, illuminated by a knowledge of the past and a judgment drawn from succeeding events. A picture of the conditions of medical practice and of public health in West Virginia at the beginning of our half-century of existence as a state, would be the best background upon which to mark the notes of advance and change. To outline this vision, we could perhaps do no better than to put ourselves in the place of one of the old-time physicians in one of the central towns of the region at the period just before the war. Let us suppose him established in his practice and then ask ourselves what was the character of his preparation for his work; what the extent of his knowledge and equipment; what the character of his clientele; what his relations to them and to his fellow physicians; what co-operation, if any, the public authorities offered to him in his labors; what were the details of his daily life and practice, and what the rewards and remunerations of his work.

To the spectator of his person and life this follower of the healing art will appear in no wise extraordinary, nor will his uneventful years seem to demand attention different from that given to the life and work of any one of his fellow-citizens. Nevertheless, this ruddy old gentleman, somewhat stern of countenance, somewhat shabby of attire, somewhat brusque and forbidding of manner, is a man of rare human greatness, a man who is leaving his indelible mark upon the neighborhood as he drives the country roads in his ceaseless rounds, night and day, summer and winter.

He is to the manor born; here among these common hills he first saw the light of day; the people to whom he ministers are the boys and girls with whom his boyhood days were passed. To them he is "Doctor John" or "Doctor Will." He knows their secret sorrows as well as their open joys. With sealed lips, with busy hands, with generous heart, he fits into every home in the very remotest of the mountain districts. The foot-falls of his horse have sounded upon every highway and by-path and tortuous trail leading to a human habitation, no matter how forlorn or neglected it be, no matter how degraded or destitute the dwellers therein. He means more to his generation than words can tell. He means much to them at that dread time when "pestilence walketh abroad," and when the ears of the stricken listen eagerly for the doctor's coming, knowing that he will not fail them in their evil hour. But he means no less to them after the shadow of the pestilence is lifted, and the every day life is resumed. When the common miracle of human birth is awaited, and the doctor is groping his weary way through the darkness of the night to serve as a comfort and a help to an anguished mother; when the wailing cries of the helpless infant have called him, and the fretful child is surrendered fearlessly to the soothing mercy of his rugged but tender arms; when by his mere presence he renews hope in the breast of the father and mother whose growing child lies sick unto death; when the feebleness of declining years lays the parent low, and the anxious helpmate and the weeping children hang upon the lips of the doctor in their eagerness to learn if they may further hope; when he sits by the bedside, to smooth the pillow and hold the hand of his childhood friend in the dying hour; in all these emergencies the presence and sympathy and counsel of our old-time doctor are sources of strength and comfort.

The half-century that marks the life of the young state of West Virginia witnessed the passing away of this old-time physician, whose welcome face, with the iron lines of struggle in mouth and chin, and the softened lines of humor about the deep-set eyes, was wont to haunt the quiet inland hills and glades and valleys. To the thoughtful reader his passing away must needs be accompanied by a nameless, aching sense of irreparable loss.

Simple was his preparation for his work. First of all, before he could think of taking up the study of medicine, he had to be touched by the divine fire of love for his fellow men. Cupidity uttered no call to him. The doctors whom he saw and knew were never anything but poor in this world's goods. Not one of all their number left a competency for his family, and more than one died in dependence and poverty, if not in absolute want.

As was the custom of the time, a custom gone out of vogue gradually during the half century we are chronicling, our young altruist and aspirant for the profession became a student under one of the practitioners of his acquaintance in the neighborhood. His time of apprenticeship would extend through a period of years varying from three to seven, dependent on circumstances that were variant in each individual case. During this period the young student would have the advice and direction and example of his preceptor. He would have access to the doctor's scanty library; but the beginner's knowledge of medicine was acquired not so

much from reading and study as from association with the doctor. He rode with his preceptor on his rounds, held the basin when the patient was bled, and helped to adjust plasters, bandages and splints. In the office he ground the powders, mixed the pills, made the tinctures and infusions, washed the bottles, served as office-boy, and in addition performed the most menial duties. In this method of teaching the personal element was so pronounced that everything, in fact, depended upon the preceptor, save what natural talent and industry might accomplish.

The self-reliance, the readiness, the expertness and the knowledge of human nature thus acquired, went far to compensate for the lack of more modern methods of preparing for the actual work of medical practice. Anatomy could be studied only by observation of the living body and by the aids of the doctor's books and plates. Dissection was out of the question, unless the student was one of those fortunate few who could supplement their years of apprenticeship by one or two terms, of four months each, at some medical college in a neighboring state.

Once entered into practice, armed with all the advantages for the acquirement of knowledge that the time afforded, the doctor of this period was yet poorly equipped, if he were to be judged by our modern standards. Modern physiology, the splendid structure built upon the scientific foundations laid in the first half of the nineteenth century by Johannes Mueller and Claude Bernard, was then unknown. Humoral pathology, based on the discarded theory that all diseases are due to the disordered conditions of the humors and fluids of the body, was the only guide to the doctor in the formation of a judgment concerning the malady that afflicted his patient. Rudolph Virchow, the father of the modern cellular pathology that has shed such a brilliant light upon the processes of disease in the human organism, was then teaching and writing. He published the results of his first important studies in 1850, but the ready acceptance of his views had to await the new era that was not yet fully dawned. Medical chemistry, as we know it today, unlocking the secrets of the body fluids in health and diseases, had not yet been developed.

The microscope had been known to mankind for centuries, but its modern use in clinical medicine was as yet unforecasted. Pasteur had already, in the late fifties, made his first illuminating discoveries in bacterial chemistry, but not till the seventies was the knowledge of virulent microbic diseases attained.

Laennec gave the stethoscope to the world in 1819, but for a generation it was looked upon as a medical toy. The treatises upon the practice of medicine used in the colleges to which our prospective practitioner would have gone, gave no inkling of the importance to mankind of this instrument of diagnosis.

Other instruments of precision that aid in the making of accurate diagnoses, instruments that are in constant use by the physician of today, were unappreciated by the old-time doctor in our state. The ophthalmoscope had been given to the world by Helmholtz in 1851, and the laryngoscope by Czermak in 1858, and the common forms of the various specula were being devised; but they were not in the instrumentarium of the

general practitioner. The first sphygmograph was not imported to America until 1870. In that same year the usefulness of the hypodermic syringe and of the fever thermometer was urged upon the doctors of the state. They were informed that a good syringe could be obtained for four dollars, and a pocket-sized fever thermometer at a cost of three dollars and a half.

The materia medica of the period was consistent with the old humoral pathology then in vogue. One of the leaders of the profession in our state, who belonged to the new era but was conversant with the old. tells us that his predecessors "believed that the patient was nothing if not bilious; and believed that there was practically but one organ in the body, the liver, and that this was to be unlocked at stated intervals, and entered and swept and garnished with mercury; and believed, moreover, that in at least half of the known diseases, salivation and salvation were synonymous terms." Another medical writer, referring to early therapeutics in our state, confirms this, saying: "Calomel was the sheet anchor. In the way of medicine, all other remedies were considered subordinate to this, and its use was usually pushed to salivation." And still another, writing in 1879, makes this statement: "Not many years ago Calomel was considered the indispensable drug in practice. Our predecessors, without calomel, were artillerymen without ammunition—Sampsons shorn of their locks. The tongues that were swollen, the teeth that were loosened, the gums that were made tender, will present a horrible array of testimony when doctors get their deserts." Happily there were other remedies in the doctor's saddle-bags.

Fevers of various kinds called for treatment. Along the Ohio river, where the population was densest, intermittent fever was common. It was rare in the tier of counties immediately back of the river, and was almost unknown in the central area. It was treated with the bark of dog-wood, cherry and poplar digested in whiskey, or with a decoction of boneset. Remittent or bilious fever was the summer and fall disease, and on its incursion the patient was generally vomited freely with lobelia, after which he was purged with infusion of white walnut bark, and sweated with copious draughts of warm elder-blossom tea. The value of powdered cinchona bark for malarial disease was known, but the amount required to restore the patient was so great, and the supply so small, that the remedy was all but useless. Quinine, the alkaloid of the bark, was unknown until 1820, and, though obtainable, was still very costly in the late sixties. One of the most dreaded diseases was dysentery. It was treated by the internal use of "oak-ooze," May-apple root and walnut bark, slippery-elm bark tea, and bitter elm bark, regarded as a specific; hot fomentations were applied to the abdomen.

"Lung-fever" was a blanket-term to cover many obscure inflammations of the chest. Without the stethoscope it was difficult to diagnosticate in a clear and definite manner the ailments now known to us as pneumonia, bronchitis, pleuro-pneumonia, pleuritis, empyema, hydro-thorax, and incipient phthisis. Heart troubles such as pericarditis, endocarditis, and hydro-pericardium, with their attendant disturbance of respiration, made the problem more complex. The diagnosis of "inflammation of the chest"

once having been made, however, the patient was steamed with the vapor of whiskey or hot water, and in addition drinks made from herbs were given him and herb-poultices were applied externally. Virginia snake-root was considered a remedy for coughs of all kinds. Rheumatism, which was common then as now, was treated with cohosh, blood root and the bark of leather-wood, and sometimes the patient was given an "Indian sweat." Cupping was the usual external remedy for rheumatic pain as well as for neuralgia, and was freely prescribed. Blood-letting, or "depletion," fell into disuse on the eve of the new era. In its day, however, the lancet was called into use for the most diverse ills. If a person was severely injured he was bled at once; when a damsel fainted a vein was opened. Indiscriminate blood-letting; excessive purgation; mercurialization; starvation; leeching and blistering; all these are mile posts of the past. Such was the armory of the olden practitioner. The mere recital adds graphic touches to the picture of his daily life and practice.

Disease and death, the attendant scourges of humanity, did not relax their hold in favor of the mountains and valleys of western Virginia. About twice in a decade the old doctor was called upon to fight epidemics of measles and of scarlet fever. For neither of these did he have an adequate remedy, and in his experience, as in ours, the scarlet fever proved often fatal. There was no inhabited locality of the State that was entirely free from typhoid fever. It is recorded that the Asiatic Cholera was existent in this region in the fifties, and it is known to have recurred in 1864. In 1857, a noteworthy endemic of diphtheria made its appearance. Many of the more experienced practitioners were of the opinion that they had treated sporadic cases of this form of sore throat many years before under the name of "putrid sore-throat." Be this as it may, there can be no doubt that in 1857 the disease was well-marked and frequent, and often affected whole families with singular fatality. The modern boon of the diphtheria antitoxin was not among the weapons of the doctor of the late fifties, and, because of that fact, he was obliged to stand with heart devoid of hope at many a bedside.

For lack of statistics, it is impossible to tell the exact number of "doctors" practicing in the counties of the present state at the time of its formation. A careful student estimated that West Virginia contained in 1877 "612 physicians and surgeons." In this enumeration it was calculated that there were from 376 to 400 regular physicians, the remaining 236 being eclectics, homeopathists, Thompsonians, herb doctors, or cancer doctors. It is surely fair to presume that fifteen years earlier, the number of physicians in the vast extent of the state was considerably less. It would doubtless be more than a generous estimate that would place at 200 the number of regular practitioners in 1862. Concerning the character of their attainments a friendly contemporary writes: "In West Virginia the profession is, at many points, adorned by one or more active, intelligent members, who, by their industry and devotion to science, have made for themselves a name outside of their fields of labor; and there are others, too, of modest talent, scattered here and there, who but require the contact of association which a proper organization would so surely affect, to develop latent powers and capabilities of great credit to them-

selves, individually, and beneficial, in the highest degree, to their patients and the commonwealth of medicine."

When the doctor's saddle-bag, "with its horn balances and its china mortar," was the only drug store within half a hundred miles, other sources of therapeutic aid than his often had to be drawn upon in times of emergency. Then was the hour of the bustling house-wife, or of the crooning dame in the chimney corner. The treasures of domestic medical lore, not unmixed with much alloy of superstition, were then brought forth and sagely estimated. Or the old-fashioned family almanac was taken down from its nail by the window. Following this, the embryo botanists of the household were despatched to ransack the native flora of the neighboring hills and dales for suitable materia medica. If perchance it were the season when mother earth was barren, then recourse was had to the household cupboard, or to the shelves of the village store, where were to be found simple drugs, stowed away among the heaps of shoes, Rohan hats, balls of twine, packages of seeds and flitches of bacon.

In the intervals between these urgent periods of stress and storm when sickness had entered the lowly doorway of the country home, a primitive prophylaxis, of the domestic brand, served to keep alive, in the minds of the good folk, the thought of "the ills to which flesh is heir." More medicine was then taken every year by the well than is now taken by the sick. Remedies now in the medicine-box of every farmer were then utterly unknown, but in their stead medicines now quite gone out of fashion, or at most but rarely used, were taken in generous quantities. "Each spring the blood had to be purified, the bowels must be purged, the kidneys must be stimulated, the bile must be removed, and large doses of senna and manna, and loathsome concoctions of rhubarb and molasses were taken daily."

The men and women to whom ministered the doctor of half a century ago were, taken by and large, a single-minded, simple-hearted folk, and the mutual relations of the profession and the people were cordial and sincere and, on the whole, satisfactory to both. While the reward and remuneration to the doctor were of little account in the pecuniary sense, while

> "Little gold had he gathered, little gear had he won,
> His wealth but the mem'ry of noble deeds done,"

there was added recompense, notwithstanding, in the love and reverence which his patients accorded to him, and in the naive awe with which they regarded his calling, shedding a glamor about it that was not all undeserved. Warm tears of gratitude for life preserved and health restored made some amend for sleepless nights spent in anxious watchings over the sick. The modest and loyal doctor was not without his heart-burnings, however. Human nature is ever the same, and here, into these mountains and glens, as elsewhere and in every age, the impudent and presuming charlatan found his way, and, by his pleasing address and seductive suggestion, often weaned away from truth and science the devotion of the unsophisticated.

Between the lines of the foregoing sketch of the old-time doctor and his patients, the reader will discern the ready evidences of the spirit of

individualism that pervaded the community in all matters that related to the health of the inhabitants. It was the evening twilight of an age dominated by individualism. "Each one for himself" was the thought in the various members of the community. A day and time were soon to dawn when a different spirit would prevail; when the thought that would tend to find a place, unconsciously at least, in the minds of men would be "One for all, and all for one." This was to have its effect in drawing together the interests, private as well as public, of the dwellers in what is now West Virginia. Before the war, however, each individual householder, in the country districts especially, was a solitary unit of sanitary administration, concerned alone in the safeguarding of himself and family.

From the modern viewpoint, the negligence of the state in matters of health was simply appalling. The statement might be made in strictest truth that absolutely nothing was done by the public authorities of the commonwealth to preserve the health of the people. Even as late as 1878 the only legal regulations that could be deemed sanitary in character were few and totally inadequate, and, such as they were, they proved futile because of want of proper enforcement. Of course, any trade or occupation proven injurious to health might be enjoined or removed as a nuisance. When a mill-dam was condemned, inquiry was to be made whether the health of the neighborhood would be endangered by the stagnation of the water or otherwise. There were also on the statute books provisions against the selling of unsound or adulterated food, drink or medicines. These laws, however, were dead letters. An enactment was made in 1861 providing that the Governor appoint three persons to act as vaccine agents, located in Wheeling, Charleston and Martinsburg, who were to collect and supply vaccine matter to any citizen who might apply for it. Each one of these agents, appointed annually, was to receive as remuneration for his services twenty-five dollars a year. In cases of destitution, local overseers of the poor were allowed to furnish free vaccine matter and to provide for vaccination at the expense of the township.

Previous to 1881 there was absolutely no enactment on the statute books of the state regulating the practice of medicine. The regular practitioner had no legal status whatever. Whenever the terms "physician" or "surgeon" were mentioned in the laws, as for instance in the provisions concerning inquests, examination of lunatics, appointments to the Colonel's staff, to the hospital for the insane, to the penitentiary, and the like, they applied without distinction to the intelligent and scientific physician and to the murderous pretender and quack.

Thus were the people neglected by the state in the important matter of their health and physical well-being. The individual citizen had to depend, for the preservation of health, upon his own care and efforts, aided and guided by the devotion and advice of the lone family doctor. When that strength and resource failed, the destructive processes were left to triumph.

Consultation by two or more physicians at the bedside of the sick so common to-day, was then rarely possible. The means of inter-communication were difficult, tedious and expensive, and the nearest neighboring physicians were not only far distant, but were often strangers to one

another. Each one pursued in dreary professional isolation the daily routine of his practice, storing up such clinical facts as may have fallen under his observation, relying on his own strength and wisdom and courage as he silently wrestled with the tremendous problems of life and death. This isolation of the doctor is to be noted as one of the salient marks of the profession at that time. The physicians of western Virginia were as well equipped in character and attainments and ideals as were those of like numbers in any part of the country in the early sixties. The individual units of the guild were worthy factors of social service, but there was absolutely no cohesion in the mass. Without proper understanding of one another, most often without acquaintance even, scattered far apart, the only bond of union that held them was the catholic love of their fellowmen and the common inspiration of their noble calling.

Such was medical practice in the present West Virginia on the eve of the new state's birth. To grasp fully the import of the changes that followed, the reader must bear in mind that there were at work two great forces—the one world-wide, silent and constructive; the other national, clamorous and shattering. The light of a new era of medical science was abroad in Europe and its rays had reached to the present confines of the Mountain state. The scientific world was just awakening from the long sleep of the eighteenth century. The science of medicine was stirring uneasily in token of an early rousing. Here in the loyal counties of the Old Dominion, however, the premonition of the destined conflict at arms numbed the energies of the profession of medicine as it did all other civic activities. Over the whole state brooded that terrible quietude, that oppression of the union between quietude and terror, that was felt as in a dream from which one might awake screaming. It was like a thin cord stretched tight, that might snap with a noise like thunder.

The terrible stillness was broken at last by the bugle note of war. The lethargic souls of men were roused, and thousands of immortal spirits were soon blazing with alternate hope and fear. The sword had been drawn; and the sword is "a magic wand—a fairy wand of great fear, stronger than those who use it—often frightful, often wicked to use. But whatever is touched with it is never again wholly common. Whatever is touched with it takes a magic from outside the world." War had come to put an end to an evil peace, and that old thing—fighting—made men young again, and it brought to the medical profession of West Virginia as new a birth as came to the state itself.

Most obvious and superficial of the results of the medical participation in the great conflict was the rise of surgery to a distinct accomplishment. The fiery and bloody ordeal of the war gave an impetus to American surgery that quickened into activity the entire surgical world, and the profession of our own state had its full share in this triumphant rejuvenescence. In 1863 it was still optional at the University of Pennsylvania for the student to take the course in operative surgery, and it

was limited to amputations and ligation of arteries. Lister had not yet begun his studies on the causative relation of germs to pus formation in wounds. Suppuration, secondary hemorrhage, septicemia, pyemia and "hospital gangrene" were frequent and dreaded complications of operation, and "surgical fever" was its usual accompaniment. A wounded joint generally involved the loss of the limb. Compound fractures and dislocations gave cause for serious alarm. The preparation of a patient for surgical treatment meant rest, tonics, purgation and selected diet. For purposes of disinfection about the place of operation solutions of chlorinated soda and of nitrate of lead were used. Castile soap and water were employed for cleansing at the site of incision. Frequent recourse was had to strong escharotics, chief among them being nitric acid, Condy's solution of permanganate of potash, a solution of bromine, or the actual cautery. Prepared lint and charpie were used for dressings. With inefficient resources the surgical practice of fifty years ago had to contend against formidable difficulties. The success that it achieved was largely due to the personal qualities of the surgeon himself. "And there were giants in those days." The camp and field of war developed many operators, skilled, expeditious and masterful. The marvellous development of military surgery on the battle-grounds gave an impulsion to the surgical art that extended into civil life after the close of the war. Amputation, ligation of arteries, excision of external tumors, lithotomy by the perineal route and surgical treatment of stricture make up the list of the chief operations that afforded opportunity in civil practice for the skill and daring of the old-time surgeon.

Less obvious than the development of surgery, there was another result of the war that was vastly more significant and far-reaching in its effects upon the medical profession. This was the recognition of the duty and value of unity of action. All men's eyes had been raised to see the vision of national union. The loyal hearts in the state were fired with ardor to maintain it; and the same flame that kindled the patriotism of the soldier likewise melted away the barriers of the individualism that encompassed the citizen. A new spirit was born of the war—the spirit of co-operation. Men learned that combination is stronger than witchcraft, and that it brought to them something from outside themselves, something positive and divine, something that mere disjoined individuals can never possess. The energy of this new spirit touched the medical profession and, uniting with the newly enlightened medical science that had already come from over the seas, ushered in the New Era of Medicine in West Virginia.

The new leaven of the spirit of union, cast into the old elements of the profession already existing in the state, soon transformed the whole mass. The modern conceptions of medical science took on vigorous life, and the old ideals of the profession took on reality. Not invention, but renovation, was the note that marked the new era. Medicine awoke and began working, not upon, but in, its material. Heretofore each worthy member of the medical profession had felt himself held by an invisible bond to all

other worthy fellow-workers. The hour was come for them all to be united into a visible brotherhood, to be brought face to face, to touch shoulders and to clasp hands. The ideal was to be stiffened with reality.

In a very few years an organization was accomplished that gathered together at its annual meetings the best members of the profession from all the most distant parts of the state, from the Kanawha on one side, to the waters of the Shenandoah on the other; from the Panhandle in the North, to the Greenbrier region in the South. In February, 1867, a call was issued for a convention to be held in April of the same year at Fairmont, for the purpose of organizing a State Medical Society that would eventually take in "all members of the regular profession." Twenty-one physicians answered roll-call at the Fairmont meeting, which adjourned to meet at Wheeling in October, 1867, in semi-annual session. At the end of the Wheeling meeting sixty-two members were enrolled, and when the society met at Clarksburg in 1869 the roster contained almost 100 names.

As far back as 1835, and again in 1847, tentative organization of the local medical profession had been accomplished in Ohio county. The records now extant of these early organizations are too scant for further survey. In August, 1868, however, a new organization, the Ohio County Medical Society, was effected, and it has continued in vigorous existence till this day. Mason, Wood, Cabell, Lewis and other counties caught the same spirit of union, and at an early period of the new era were sending delegates to the annual sessions of the State Medical Society. In this jubilee year these and many other local associations of medical men are flourishing throughout the state. Very early in its existence, the "Medical Society of the State of West Virginia" caught the vision that pictured the state busying herself in protecting and fostering the public health. The transactions of the early meetings record discussions on public sanitation and hygiene; on the history, causes and prevention of epidemics, and on other like topics. An evident appreciation was shown of the great truths that disease is an enemy not only to one, but to all, and that prevention is better than cure. The project to promote the creation in West Virginia of a modern state board of health soon found adherents in the organized profession, and definite steps were taken towards realization. Much work of an educational character had to be done, however, before any part of the project could be realized.

In the winter of 1875 an effort was made to procure an act of the state legislature that would establish a State Board of Health. This venture failed. A second effort was made in 1877, with the added impetus afforded by a recommendation of the governor, favoring the act, in his message to the legislature. The project met a second defeat, however. One of the members of the legislative body who opposed the bill said on the floor of the House that his opposition was based on the belief that "No one would get sick or die until his time comes." The physician who, as a member of the legislature, had moved the passage of the health act and had strenuously urged its enactment, reported its failure to the meeting of the state medical society. He added, however, that he felt, upon reflection, that he had shown more zeal than sense in urging it, since the question had never been agitated in the state, and the people

in general knew little or nothing about "state medicine." He concluded with saying, "It is our first duty to get this subject rightly before the people, and to have them understand that they do not get sick and die until there has been some violation of some physical law, or until their three score years and ten are passed." Then began the active propaganda on the part of the profession, having for objects the instruction of the populace concerning the true meaning and scope of sanitary laws and their administration, and the awakening of a living faith in their importance and efficiency. That campaign has been waged with varying fortunes ever since, contending against the prejudice of the legislator, the defiance of the venal journalist, the arrogance of the charlatan, and the ignorance of "the man in the street."

The first real promise of ultimate success in this warfare for the health of the people came with the passage by the legislature on March 8, 1881, of "An Act to establish a state board of health, and regulating the practice of medicine and surgery." This act went into effect in June following, and provided for the appointment by the governor of two physicians from each congressional district, who were to be "graduates of respectable medical colleges, of not less than twelve years continuous practice, and distinguished by devotion to the study of medicine and the allied sciences." The persons so appointed constituted the state board of health; their term of office was for two years. The secretary was the executive officer of the board and it was his duty to correspond with local boards of health, to give needful advice, to visit on request localities where endemics, epidemics, infectious and contagious diseases, or other unusual sickness were prevalent, and to adopt proper regulations for their suppression. The board as a whole was to take cognizance of the life and health of the inhabitants of the state, and cause to be made sanitary investigations, and inquiries concerning the causes, prevention and methods of remedying diseases in men and domestic animals; to advise with regard to the location, drainage, water supply, heating and ventilation of coal mines, and the drainage and sewerage of towns and cities. It was given power to establish and maintain quarantine when invasion of the state by infectious or contagious disease was threatened. The Act further provided for the establishment of county boards of health. These, and such local boards as were already established in cities and towns, were to be auxiliary to the state board of health, and to act in harmony with it.

The practice of medicine was regulated by provision of the Act that required the possession of a certificate from the board by any person professing publicly to be a physician, prescribing for the sick or appending to his name the letters "M. D." The certificate was obtained in the following manner. If the applicant were a graduate of a medical college recognized as reputable by the board, it was sufficient for him to present his diploma for verification, as to its genuineness, to those members of the state board of health appointed for his congressional district. If he were not a graduate of such a medical college he was required to pass a satisfactory examination before the two members of the state board in his district, together with the presiding officer of the local board of health of the county in which the examination was held. Physicians who had been en-

gaged in the continuous practice of medicine in the state for more than ten years prior to the passage of the act were given a certificate on the presentation of an affidavit as to the number of years they had been in practice. Itinerant physicians were permitted to practice on paying to the state board of health a special tax of fifty dollars for each and every month, and fraction thereof, during the period of their practice. The sum of one thousand dollars was appropriated from the state treasury to pay the salary of the secretary of the board, and the travelling and other necessary expenses incurred by the members in the performance of official duty. No other compensation was allowed them. Moreover, the board was required to pay into the state treasury all money received for certificates or collected from fines and special taxes. As will be seen from a study of this digest of the first health law of the state, the newly created board of health was merely an examining and advisory body. It was given no power nor means to do real constructive work in the interests of the public health. With its establishment, however, the first milestone had been planted on the road to better things.

During the winter of 1881-1882, by the establishment and rigid enforcement of quarantine against the cities of Pittsburg and Alleghany, the new health board saved West Virginia from the ravages of small-pox. The appropriation from the public treasury proving inadequate, the doctors of the state made up a private fund of several hundred dollars to insure energetic administration of the law in this emergency. The early and concrete proof of the wisdom of the new health law appealed to the thoughtful, and, as a result, during the adjourned session of the legislature, in 1882, there was a demand for the establishment of a permanent health law. The governor declared in his message to the legislators that "the preservation of the public health should be one of the first concerns of the government," and he strongly urged sufficient appropriation. Accordingly, "the Amended Act of 1882" was passed in March. In several particulars the amended act was an improvement upon the law of the previous year. It carried an unconditional appropriation of fifteen hundred dollars per annum for the support of the State Board of Health; it provided for payment out of the county treasuries for service rendered and expense incurred by local boards; it stipulated that, though a county court might nominate the local health board, the State Board should have the right to confirm or reject nominations; it granted to local boards ample powers to enforce local quarantine; and it required "itinerant physicians" to pay the monthly tax in every county in which they practiced.

"Chapter 150 of the Code, concerning the Public Health," substantially as enacted in 1882, has continued until this year to mark the limit of advance made by the state in the matter of safe-guarding the public health. Minor changes were made in its provisions in 1895, 1901 and 1907. The time of continuous practice required for eligibility to membership on the board was reduced first to ten years and later to six. The term of office was lengthened to four years, and a per diem of four dollars allowed for time of actual service. Changes were made in the details of examination methods. The dawning of West Virginia's semi-centennial year thus

found the state board of health no more than an examining and advisory board, except in times of threatened epidemic. The fees from the applicants for license to practice repaid the state treasury for the expenses of the board. In other words, the potentiality of the body to promote the health of the people by positive and constructive measures was still curtailed by lack of adequate powers, and the cost of its maintenance was borne by the medical profession.

The legislature of 1913 signalized the jubilee year by making important amendments to the Public Health Law. These provide that the secretary of the board, to be named by the governor, shall be ex-officio State Health Commissioner, devoting his whole time to the duties of his office, and possessed of the powers pertaining to offices of like kind. He is allowed a salary not to exceed three thousand dollars per year, with travelling, clerical and other necessary expenses incurred in the performance of his official duties within the state. The board is given power to maintain a laboratory, and to employ such chemists, bacteriologists, servants and agents as are needful for the proper performance of its functions. These provisions are made efficient by an appropriation of fifteen thousand dollars annually for the uses of the board. Two additional features in this advanced health legislation of 1913 are worthy of note here. One makes it the duty of all county or municipal officers to meet with the State Board of Health, or its representatives, at least once a year to attend a school of instruction for the purpose of becoming familiar with their duties in the interest of public health. The other directs the State Board to provide vaccine lymph, diphtheria antitoxin, tetanus antitoxin or any other serum preventives of disease, free of charge to the poor and indigent, and in other cases where in its judgment it may be necessary to prevent contagion. Already in 1911 the legislature had passed an act providing for the establishment and maintenance of a tuberculosis sanitarium under the supervision of the state board of control. Terra Alta in the glade country was selected for the site, and the institution is now a reality. This move forward in the crusade against tuberculosis was confirmed by the legislature of 1913, which also appropriated funds to be used in educating the people concerning the means of preventing and eradicating "the great white plague."

West Virginia has made an infinite stride forward in state medicine during the fifty years of its existence. The half-century began with no provision for the public health; it closes with a splendid health law on the statute books of the state. The first general hospital in what is now West Virginia was founded at Wheeling in 1850. It was the only chartered institution of the kind in existence here at the inception of the new commonwealth. Within the last score of years, however, hospitals have been established in all parts of the state. Some of the smaller communities, even, can now boast of hospital service; and a system of Miners' Hospitals inaugurated by the state in 1899 is giving excellent results in a restricted field of effort. To many of these hospitals are attached training schools for nurses, each sending out annually its quota of young women skilled in the art of ministering to the sick and wounded.

Medical practice in West Virginia has gone forward steadily during the

last five decades, keeping pace with the advance of the science and art of medicine throughout the nation. The physicians of the state can be reckoned in thousands, and their character and attainments are of a high order. The profession at large has been elevating its standard by encouraging among its members a strict adherence to the high ethical code that is set to guide them. The State Board of Health has aided in the attainment of this purpose by raising continually the standards of requirement for successful examination on the part of applicants for license to practice.

In the special domain of surgery the state can point to many able and even brilliant practitioners. Every community has one or more skillful surgeons, and the wonderful possibilities to which the door was opened by the advent of antiseptic surgery and its finer development, aseptic surgery, are fully realized in West Virginia in 1913.

The light through which must be viewed the beginnings of all activities in West Virginia is blurred by the reek of war. Enough is seen clearly, however, to permit a fair judgment concerning our growth and progress. Great as are the changes and advances that the state has witnessed within its confines during the fifty years of its life, there is none in any field of human endeavor that is more noteworthy and more vital than the development of medical practice and public health.

Development of Journalism

By Col. John E. Day, Secretary Semi-Centennial Commission, Wheeling, W. Va.

"You cannot publish a nonpareil paper in a long primer town".

This pertinent apothem is well understood by the newspaper guild, and to the layman it may be explained, liberally to mean that progressive ventures will not be sustained in unresponsive communities. For this reason we may come to know the general characteristics of a people as reflected by the class of newspapers they support. Their moral standards, culture and progressiveness, or their shiftlessness, their "dead center" inactivity, neither going forward nor backward, are faithfully mirrored in the columns of the press. This unerring test applied to the people of West Virginia today is mutually complimentary to the character of the papers published within the borders of the state and their readers and patrons. The newspapers of West Virginia are as wholesome in tone and as progressive in spirit as similar publications of any other state in the Union, considering the limitations of the field compared with the more densely populated sections of the country. The established city dailies are notably comparable with those of their contemporaries in communities of other states of the same size, and in some cases excel in particular and important features. With regard to the country press, or, strictly speaking, the county-seat paper, their reflective ex-

cellence of their clientele is quite marked. They are well written, ably edited, and as acceptably printed as the same class representing the more largely developed portions of the land. The average is above the publications of the older settlements of the more advanced states. This may seem to be a partial or prejudiced verdict, but it is simply the honest impression of the writer who has become familiar with the productions of all the states through association, observation and actual work in the various fields of endeavor. Viewed from a strictly moral aspect. the people of West Virginia have cogent reasons to be proud of their representative newspapers. They are less smirched than journals of other states, with what has been dubiously called the "venality of the press." They are vigorous but seldom offensive in their opinions, and to the best of their ability are leading the multitude to higher planes of serious thought and action, inspiring a loyalty to the established institutions of this great American Nation, and forever instilling a patriotism and state pride that have marked every step in progress taken by the state.

The Early Beginnings.

These results and attainments have come up through long years of progression, dating as far back as 1789. The first paper known to have been published within the territory that now comprises West Virginia was printed at Martinsburg in 1789 and was called *The Potomac Guardian* and *Berkeley Advertiser*. As the size of the paper was only 9 x 15 inches the name would appear to have been larger than the paper. At the same town the *Martinsburg Gazette* was established in 1799. This paper carries with it an unusual distinction, as it was owned by Nathaniel Willis, the father of the celebrated writer, Nathaniel Parker Willis. The record continues in crediting Martinsburg with the third paper established in West Virginia territory, in 1800, carrying the ponderous name of *The Berkeley* and *Jefferson County Intelligencer* and *Northern Neck Advertiser*. The first newspaper in trans-Allegheny Virginia appeared at Morgantown in 1803. The next was *The Repository*, which was established at Wheeling in 1807. It was succeeded by the publication of other journals, notably the *Times Gazette*, *Telegraph* and *Virginian*, all early birds in the field of journalism—though it is not related that they caught many compensatory worms. In 1808 the *Farmers Repository* was launched at Charles Town, Jefferson county. It was the first journal devoted to agriculture west of the Blue Ridge range of mountains. The *Kanawha Patriot* was issued at Charleston in 1819, *The Western Courier* in 1820.

These comprised the pioneers of the journalism of West Virginia, which blazed the way through many strenuous years of primative publication. They were later followed by *The Western Virginia* and *Kanawha County Gazette* by 1826, *The Kanawha Banner* by 1831, and *The Kanawha Republican* by 1841, and by many others.

The increase in publication was not rapid up to 1850, but when the sparse settlement of the state at that time is considered the existence of three dailies and twenty-one weeklies at that period was not a slow march of progress. The first three dailies which were printed in the territory in-

cluded in West Virginia were published at Wheeling which for many years, (until after 1860) was the only community supporting daily newspapers.

The Spurt of a Decade.

There was a spurt in the development of the newspaper publishing business in the decade from 1850 to 1860, when the total number of publications in the state increased to forty-three. In 1850 the twenty-four publications were confined to fourteen counties. The forty-three of 1860 were distributed among nineteen counties, and comprised three dailies, two tri-weeklies, thirty-six weeklies and three monthlies. At this period there were three religious publications in existence. One of them was noted as the organ of a demonination then in its infancy, but which has since grown into one of the strongest church organizations of the country. Reference is made to the *Millenial Harbinger* published at Wellsburg, Brooke County, by the Rev. Alexander Campbell, the founder of the sect, then called the Campbellites, but now designated as the Christian Church. It was monthly publication, having the remarkble circulation of 8,500 copies. The largest circulation of the secular press in those days never passed the 1,200 mark for weeklies and 900 for the dailies.

A chief factor in preserving western Virginia to the Union, and the main instrument in perfecting the independent statehood of West Virginia, was the *Wheeling Intelligencer*, established in 1852. Under the editorship of the late A. W. Campbell in the years preceeding the final breaking away of the Southern states from the Union, it fearlessly gave voice to adherence to the integrity and indissolubility of the Nation. It was also the only paper south of Mason and Dixon's line that was outspoken against the institution of slavery. It was the great inspiration and the rallying force of the Union sentiment in the western counties of Virginia that armed the people and sent them forth to drive back the invading forces of the Confederacy. It is worthy of note that its virile editor, a man who stood among his colleagues in those trying and bitter times as first among equals, was liberal enough and patriotic enough to suppress his former antagonisms and to throw his warmest support to the passage of the Flick amendment by the legislature of West Virginia which restored the civil and political rights of those West Virginians who had taken up arms against the Federal government. The Intelligencer is the only daily of that period which has continued publication to this day. Only four other newspapers published in 1860 survive with it—the *Wellsburg Herald*, *Virginia Free Press*, *Spirit of Jefferson* and *Shepherdstown Register*.

Beginning of New Era.

With the close of the civil war and the newly formed state started out on its career the press was endowed with new responsibilities and was the lamp that lighted the way to the development of the young commonwealth. It was during the later 70's that the advance in West Virginia journalism became pronounced. The old fashioned primative meth-

ods of getting out a newspaper were superseded by modern appliances. The swift perfecting press took the place of the old fashioned flat bed machine. The cheap plate and ready to print establishments made it possible for state weeklies to issue their publications at a great reduction in cost. In the larger printing houses the linotype machine was introduced, one of the most marvelous inventions of the age. The number of newspapers grew by leaps and bounds, until at the last accounting for 1912 the total number of publications had increased from forty-three in 1860 to two hundred and twenty-three, published in ninety-five places. Everyone of the fifty-five county seats is provided with a newspaper. There are thirty-two dailies now published within the state. There are one hundred and seventy-two weeklies; four semi-weeklies; one semi-monthly and fourteen monthlies. Outside of the political newspapers, which are about equally divided between the two larger parties, the class or special publications are as follows: fraternal 6; religious 4; college 2; negro 4; legal 1; educational 3; agriculture 2; baseball 1; medical 1; labor 3; Italian 1; German 1.

The scarcity of newspapers printed in a foreign tongue is due primarily to the fact that West Virginia holds the distinguishing position of having the largest percentage of native born population of any state in the Union. In years gone by, the Germans sustained a worthy publication, the *Virginia Staats Zeitung*, founded in 1848 in Wheeling. It changed hands and name frequently, became a daily and, for sometime, was profitably published as such. Its successor is now published as a weekly. One of its publishers gave the writer a very satisfactory reason for its declining circulation. He said that its support was mainly obtained from the older German residents, but when one of them died it lost a reader—lost never to be replaced. The German youth became thoroughly Americanized in speech and customs and preferred to read the news in the English language.

The character and the makeup of the old newspaper were at startling variance from present modern publications. In the earlier years of West Virginia journalism, the editorial utterances were ponderous, and sometimes extremely florid; and the treatment of local news was singularly faulty and incomplete. In appearance and contents these papers were all much alike, set solidly, in small type with single line heads and with no display advertisements. Very little space was devoted to the retailing of crimes, scandals or local gossip. The editorial page was the all important feature, for that was the day of personal journalism. The contents were heavy, without the breezy, entertaining lightness of the newspaper of to-day. In the early thirties, and up to the beginning of the great American conflict in 1861, the journals more nearly approached the magazine with fiction, literary essays and book reviews. Foreign news even took precedence over local affairs of moment. The editor in those days was a pastmaster in invective and epithet, and his freedom in personal criticism often provoked physical combats. The leanness of news features in the papers of that day and generation is easily accounted for. Labor of the particular kind required in a newspaper office was exceedingly scarce, the sources of news were remote, and the appliances for

getting out a paper were very crude. Frequently the newspaper of that day was a one-man paper, the publisher being the editor, reporter, typesetter, pressman and distributor.

What a revolution has taken place in the newspaper publishing business and the character and makeup of the paper! Journalism to-day is largely impersonal. The personality of the editor is subordinated to the news features. The reading public now forms its own opinions without waiting for its favorite editor's expressions. But this does not mean that the modern press has lost its influence with the people. There is a larger latitude of thought to-day and more independant expression of opinion, and it is growing stronger every day. Hidebound party fealty is a thing of the past, and the newspaper is profiting by this cleavage.

The personal history of West Virginia journalism is interesting, but it cannot be adequately treated in this article. It would take volumes to do it justice.

The modern newspaper is doing well, and accomplishing much good that is not apparent on the surface. It is sometimes called on to combat strong public sentiment which it considers vicious; and is accused of "personal interest" in the matter under consideration. As a modern writer has aptly put it, "public sentiment is not always right."

The ancient lineage of West Virginia journalism has been fairly well preserved in the *Virginia Free Press* of Charles Town, which claims a sustained publication of 102 years. The *Free Press* was established in 1821, but it absorbed the *Farmers Repository*, established in 1808. Issue was suspended for two years during the civil war, owing to circumstances over which it had no control. The other early journals which continue publication to this day are the *Spirit of Jefferson* (founded in 1844), *Wellsburg Herald* (founded in 1846) and the *Shepherdstown Register* (founded in 1849). May they continue to live and prosper.

A great journalist, some years ago in an address on journalism, gave utterance to these living truths: "The principles of journalism are fundamental: (1) The chief function of a public journal is the rendering of public service; and (2) the first requisite of full excercise of that function is perfect freedom." Going still further into the elementary verities, he added: "Servility to party spirit is the abdication of that moral leadership of opinion which is the great function of the political press. Instead of submitting to be led by party leaders it should lead the leaders." There is an illumination of this character all along the line of journalism in West Virginia. It is becoming more pronounced as the years go by, and the hope of the future lies in a complete exemplification of these immortal precepts.

Educational Development

By M. P. Shawkey, State Superintendent of Schools.

The public school system of West Virginia is a little less than fifty years old. It began with the election of Dr. White as State Superintendent in 1864, in accordance with the educational provisions of the first constitution of the state. To be sure, Ohio, Kanawha and Jefferson counties made a beginning before that date, acting under authority of the first general school law of the Old Dominion. This law was enacted in 1846 and gave to any county the authority to establish a system of free schools within certain prescribed limitations. To Jefferson county belongs the honor of being first to establish such schools in the present state of West Virginia. This was done in 1847. Ohio and Kanawha Counties followed Jefferson's lead by launching a single school each in 1848. Thus we have before us the simple beginnings of the present state-wide school system of West Virginia. Compared with what we have today they were, indeed, as the grain of mustard seed compared to the full grown tree.

While the free school idea met with much favor among most of the people west of the mountains, the growth of schools was slow, owing to a number of things, but more especially to the sparseness of the population and the straitened circumstances of the people. All this was preliminary to the real development of our present school system. It represents a period of uncertainty, a groping in the dark, a searching after light.

When Dr. White was chosen State Superintendent and entered upon the duties of that office immediately ideas began to crystallize, the features of a system began to shine forth out of the cloudy doubt and uncertainty.

The report of Dr. White's first year's work sets out with some definiteness the number and kind of schools in the state at the beginning. By that report we find that of the fifty counties then composing the state twenty-two had established a system of free schools, while eleven others had taken some steps toward the establishment of such a system. There were 133 schools with 431 rooms and an enrollment of 17,972 pupils. The enumeration showed 63,458 children of school age. It was a great good fortune to this state that the direction of her educational interests was at the very first committed to so wise a leader as Dr. William Ryland White.

Laying the Foundations

Dr. White had been a student of Horace Mann, America's greatest educational statesman, and a co-laborer with him. While admitting some discouragement on account of the hard conditions of the early life of the settlers and because of the lack of interest on the part of a large proportion of the people, he nevertheless faced the future hopefully and planned even more wisely than he himself knew. Acting on Dr. White's recommendation, the Legislature established the West Virginia

THE OLD SCHOOL HOUSE AT HOLDEN, LOGAN COUNTY.

THE NEW SCHOOL BUILDING AT HOLDEN.

University at Morgantown in 1867. Between this great university and the humble elementary schools first established a great gap existed. How that gap has been closed will appear later. It was all in the first far-seeing plan of the first State Superintendent. Dr. White also saw that the first need of these new schools as of all schools was trained teachers. He accordingly recommended the establishment of a series of teacher training schools. The Legislature was quick to respond to this suggestion also. In 1867, under its provisions, the state acquired the property of Marshall College at Huntington and converted that institution into a state normal school for the training of teachers. Later five other (branch) normal schools were established, viz.: one at Fairmont in 1868; one at West Liberty in 1870; one at Glenville in 1872; one at Shepherdstown in 1872; one at Athens in 1872.

To call these institutions normal schools was more a declaration of faith than a statement of facts, for they were not professional schools in any sense of the word, yet it would be difficult to overestimate their value in the educational development of the state. They were at first little more than good, strong elementary schools for more mature pupils. Later they took the lead in secondary work; and finally, during the present day, they assumed the character of real normal schools. We get a better conception of the important part they have played in the state's educational development when we recall that they have enrolled and instructed, during these years of growth, something like sixty thousand of the best young men and women of the state. That conception is further quickened when we glance at the roster of men who have served as principals of these schools and note the character of the men and their prominence in the educational affairs of the state. Such men as Dr. William Ryland White, Dr. J. G. Blair, Professor U. S. Fleming, Dr. R. A. Armstrong, Dr. J. N. Deahl, Professor S. B. Brown and Honorable Thos. C. Miller tell the story of the normal school mission in such terms that any comment I might add would simply be trifling with words.

It will be found upon investigation that these normal schools for which Dr. White made such a vigorous fight, declaring that "it would be better to suspend the schools of the state for two years and donate the entire school revenue for that time to the establishment and endowment of a state normal school than to have none at all," with their ups and downs, with their meager equipment and still more meager support, oftentimes fighting for their very existence, have nevertheless reached a larger number of people in the state than any other state school and have done more for the elementary and secondary education of the state than any other institution. They have touched a larger number of teachers in the elementary schools and have been in closer touch with the masses, leading, encouraging and instructing them, than any other of our state institutions. This was their province, and while the work they did through all these years of struggle was very imperfect, the present harvest of results give additional evidence of the importance of the service which they rendered.

Other Agencies.

While recognizing the large amount and the importance of the work the University and the normal schools have done in the development of education in the state, we must not overlook the service rendered by the numerous other educational agencies that have been at work from time to time, serving in one capacity or another, with ideas very much at variance at times but all working toward the final important end. Among the important agencies in the early years especially, the old-time academies must not be overlooked. Of these Virgil A. Lewis, in his "Handbook of West Virginia," gives a list of sixty-five and calls it a "partial" list. All of these have now disappeared or have been converted into other institutions, but their vital influence may be seen in the educational sentiment and the more modern schools that have grown out of that sentiment in many localities of the state, such as Buckhannon, West Liberty, Clarksburg, Charles Town, French Creek and numerous other places. While these academies were of a local and rather temporary character, they gave rise in the latter part of the half century of our history to a number of larger and more permanent private and denominational institutions which are at the present time playing a significant part in the educational work of the state. No present-day view of educational matters in West Virginia would be complete that did not take in the West Virginia Wesleyan College at Buckhannon, Bethany College at Bethany, Salem College at Salem, Broaddus Institute at Philippi, Powhatan College at Charles Town, Morris Harvey College at Barboursville, Beckley Institute at Beckley, Allegheny Collegiate Institute at Alderson, Alderson Academy at Alderson, Davis and Elkins College at Elkins, Lewisburg Seminary at Lewisburg, Greenbrier Presbyterial Military School at Lewisburg, Mount De Chantal Academy at Wheeling and Stephenson Seminary at Charles Town.

The Legislature of 1909 recognized the value of the services that some of these institutions were rendering to the state and provided that graduates of their normal departments should be given state certificates without examination the same as the graduates of our state normal schools. The reports from last year show that the private institutions of the state furnished 22 per cent of the graduate teachers to whom certificates were granted without examination.

The other institutions that should be mentioned as contributing materially to the educational development of the state are the West Virginia Colored Institute at Institute, which was established in 1891 and is now equipped with a farm and a splendid group of buildings and enrolls nearly three hundred students annually, and the Bluefield Colored Institute at Bluefield, which was established in 1895 and is rendering much excellent service to the large colored population in the southern section of the state. This school enrolls more than two hundred pupils a year and is crowded to the limit of its capacity. Another institution belonging to this class is Storer College at Harper's Ferry which was established by John Storer, of Maine, during the Civil War, but which for many years has been partially supported by state appropriations and has been closely identified with the general educational work of the state.

The schools for the deaf and blind at Romney were established in 1870 on a small scale, but gradually the state has provided more liberally for the education of these two classes and the value of the particular service which these institutions have rendered is very great.

Effectually re-enforcing the work of the public schools and the other educational institutions are the Girls' Industrial School at Salem and the Boys' Industrial School at Pruntytown near Grafton. These institutions have been peculiarly successful in the work which they have undertaken to do.

When we glance back over the record of the state we are likely to evince some enthusiasm over the continuous, substantial and rapid educational advancement. We must not overlook the fact, however, that there have been failures and disappointments along the way, that mistakes have been made here and there, that stubborn obstacles have obstructed the path of progress, and that every advance has meant a fight to overcome opposition of one sort or another.

The Vanishing Factor.

"Pioneering" in West Virginia has become a matter of history only. The pioneer settler, the pioneer statesman, the pioneer institution and the pioneer teacher have alike disappeared. A picture of that early life which held so much deprivation, hardship and suffering softens in the distance and shows up other characteristics that appeal to the heart more favorably. The faith, zeal, earnestness and patriotism of the early mountaineers were of as genuine quality as that found among the Spartans of old Greece or the patriots of the Swiss Alps.

The log-house school was crude, but the ideals of life which it upheld were noble in their simplicity, and the passing of that old institution stirs us with mingled feelings of gladness and sorrow. While we rejoice at the day of more modern architecture, the old log-house will ever have a place in memory dear. Its gradual disappearance during the past generation is an accurate index of the thorough revolution that has been going on in the educational work of West Virginia. The figures are striking. In 1890, for instance, there were 1,007 such school buildings in the state out of a total of 4,814 of all classes. In 1900, just ten years later, the total number of school houses had increased from 4,814 to 5,916, but the number of log houses had decreased from 1,007 to 345. In the next decade up to 1910 the total number of school buildings increased from 5,916 to 6,674, but the number of log houses had decreased to a mere handful of 75. Our reports for last year show that the use of the log-house has gone forever, there being but a scattered half dozen in temporary service as a kind of makeshift, pending the construction of newer buildings.

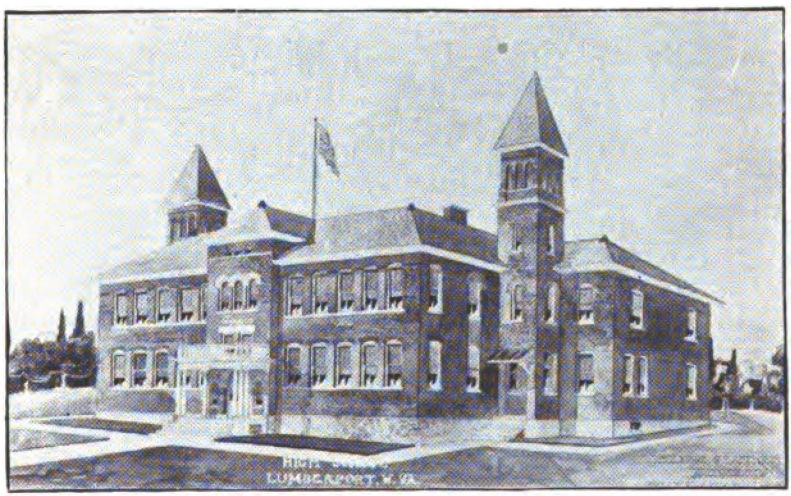
We have even gone beyond what was once considered a modern frame structure and the average community now demands that the public school shall be of such architectural design as to comply with the latest developments of science. It is built for both health and beauty and stands as an emblem of progress in the community.

Higher Standards for Teachers.

As the school system of the state developed, the demand for trained teachers became more insistent year by year. For a decade or two the public press and the teachers' institute resolutions kept calling for a reform in the method of issuing teachers' certificates. Accordingly, the Legislature of 1913 passed a sweeping uniform examination law, placing "the general regulation, direction and control of all matters relating to the examination of applicants for teachers' certificates" in the hands of the State Superintendent of Schools. This sudden change worked some hardship and probably had some temporary ill effects, but on the other hand it removed the certificate-granting authority from the sphere of local control, fixed a wider horizon for the teachers, made him, in fact, a state-wide institution. As a consequence of this open market a rivalry set in among the various districts for securing the best teachers, which was followed naturally by a distinct advance in teachers' salaries. Moreover, the new law gave the state and county superintendents a better means for supervising the work of teaching and afforded the opportunity for a successful organization of reading circles and district institutes. The important outcome of all of this is a marked and gratifying improvement in the personnel of the teaching body of the state which is showing itself in the general improvement of the schools.

A Better Day for Rural Schools.

With the revolution of the industrial life of West Virginia there came a crisis in the elementary school work. Abundant opportunities and the remunerative wages lured from the profession of teaching hundreds and hundreds of the older and even younger men and women who formerly found teaching the best business in the community, because it paid a fair cash salary and kept them in touch with the world of active thought. This sudden change was especially hard on the rural school. At the same time it was discovered that, while the towns and cities were developing hundreds of features for the enriching of life, there had been little change in rural life. Consequently those progressive teachers who were disposed to remain in the profession naturally drifted toward the towns and cities. This state in harmony with what was being done elsewhere turned its attention to the rural school problem. Among the first things to be done was to provide a supplementary school fund which would enable even the remotest rural sections to maintain a six months' term. paying at least the minimum salaries which have been fixed by law. The first supplementary fund of this kind was appropriated by the Legislature of 1908 and amounted to $50,000 for teachers' fund purposes. That amount later was increased to $75,000, and $15,000 additional was appropriated for building fund purposes at which figures it is still maintained. At the same time our teachers' institutes and normal schools began to give special attention to the peculiar problems of the rural school. This was followed in 1910 by the appointment of a State Rural School Supervisor who has especially co-operated with the district supervisors of whom there are now



NEW BUILDING FOR DISGRICT HIGH SCHOOL AT LUMBERPORT (Harrison Co.).

Courtesy of W. Va. Geological Survey.

PARKERSBURG HIGH SCHOOL BUILDING.
(From Marietta Sandstone.)

58 in service. The last Legislature showed its interest in the rural problem by providing the State University with ample funds for agricultural extension work. The development of farm interests of the state will be a potent factor in strengthening and vitalizing the rural schools.

The High School Era.

During the first quarter of a century of our existence as a state, the University, which we have seen was established in the very infancy of our state's existence, found it extremely difficult to win large numbers of students for college work. Indeed, it found it necessary to maintain a preparatory department to train boys and girls for college, and this preparatory department became the larger part of the University. The University, together with the other educational agencies, kept on preaching the crusade of higher education, and a decade ago our people began to be aroused to the need of high schools. The high school era may be considered to have begun, however, in 1909, when the State Superintendent organized the division of high schools in the State Department and appointed a State Supervisor of High Schools. The slogan adopted was "One Hundred High Schools for West Virginia within four years." The crusade was organized, literature published and sent broadcast, and wherever the people manifested an interest in the high school project, information and assistance were given in working out the porblem. Meanwhile, legislation was shaped up, and in 1911 the Legislature passed a bill providing for state aid to high schools, on a basis of a standard classification which was to be made by the State Superintendent. As a result of this movement and the various influences at work, we have today one hundred and fifteen standard high schools in West Virginia, with something like a score more in process of organization and construction. The value of high school work shows in both directions. It is first reflected in the improved opportunities for intellectual life in the various communities and in the greater interest shown in educational work in these communities, and second in large increase of enrollment in the freshman class of the University, practically all of whose recruits at the present time are coming from the various high schools of the state. For instance, the freshman class of 1912 of the University was 20 per cent larger than any former freshman class, and not only is the class so much increased in size, but the general average of preparation shown by the students is much better.

Jubilee Year Conditions.

Hamlet, striving to convince his mother of the great worth of his father, appealed to her to "look on this picture, then on this." We first took a glimpse at the Mountain State in her infancy and poverty. We saw that she aimed in the right direction, and was impelled by lofty ideals, but was inexperienced, poverty-stricken, troubled with turmoil and strife, and shaken with doubt. We have seen that at the end of the first year's existence of her public school system we had 113 schools only, with 431 teachers, with an enrollment of 17,972 and a total school enumeration of

63,458 children of school age. Note what the half century has done for us in these matters. The 133 schools have grown to 6,866. The 431 teachers have been supplanted by 9,312. The 17,972 pupils are replaced by 284,757 and the children of school age now number 382,938 instead of the 63,458 at that time.

Some visitors to the recent land show at Chicago wrote me, "We are interested in the industrial opportunities of West Virginia, but before deciding whether or not to move to your state we would like to know what facilities you offer for the education of our children." To such inquiries I am pleased to report that West Virginia now provides a good elementary school within reasonable distance of every home in the state, maintained for a minimum term of six months, that we provide reasonably good teachers for all such school at a fair rate of compensation and that we have provided abundant means of counsel and help for every community that desires to improve its educational facilities. In addition to the elementary schools there are a large number of graded schools and at this time we have 125 good high schools, being on an average a little more than two to a county. In addition to the high schools we have six normal schools that now offer courses of study whose credit will be accepted by any state in the Union. In addition to the normal schools we have the West Virginia University with a number of colleges and schools, affording a wide range of opportunities for college and professional work. Besides the University we have something like a dozen of prominent private and denominational institutions in charge of competent men, whose efforts are in harmony with the proper standard, which afford a diversity of social and school life conditions with the very best opportunities for the proper growth and development of our young people.

In addition to these we have two institutions of first class ability for the higher training and development of the colored youth of the state, besides having an interest in a third institution which has gained a reputation for the quality of its work.

The schools for the deaf and blind have been enlarged and improved and the state has manifested a disposition to provide greater comforts and more adequate training for this class of our citizenship.

The industrial schools for boys and for girls have demonstrated their ability to supplement and re-enforce the work of the public schools and they are doing no little toward making West Virginia a better place in which to live.

The diversified interests of the state afford a great variety of opportunities for industrial life, but these things have not occupied the minds of the people to the exclusion of things intellectual. It is gratifying to note that a large number of single-room rural schools even are supplied with libraries for the use of the children and the patrons of the community. In one county every single school has a library and in numerous other counties the larger number of the schools are thus equipped. We find that, although the library movement is only ten or fifteen years old, we have at this time 314,430 volumes in our school libraries.

As a demonstration of the state's faith in education and the liberality of her patriotic citizens, I wish to cite the fact that we spent last year for

the elementary and secondary schools of the state $5,081,603 and our expenditures for all of our educational institutions, including the University, amounted to $5,691,076. We have school property valued at $14342,688. Two of the leading cities of the state, Charleston and Parkersburg have recently found a demand for greater high school facilities, and have voted $300,000 bonds for the equipment of a thoroughly modern city high school.

There was a time not so very long ago when West Virginia, perhaps, might have offered some apology for her meager school facilities, but that day has passed. Let any prospective citizen of the state be assured that if he bring his family to the Mountain State, there will not only be abundant facilities for thorough and liberal education of his children, but he will find such interest and public spirit in matters of education as to afford the greatest possible encouragement for their highest moral and intellectual development.

The Development of Literature in West Virginia

By Mary Meek Atkeson, Buffalo, W. Va.

It has often been noted by writers on the subject that the literature of a country grows up in the hearts of its people. Great literature is born when the people are thinking great thoughts and are swayed by great emotions, and the genius of the writer is, after all, but crystallizing and recording the best thoughts of his time. On this account the history of a people is of great importance in a study of its literature, for political, economic and religious changes determine in a great measure the thoughts and feelings of the people. This historical development of letters is very clearly seen in a study of the literature of West Virginia.

A review of the whole subject shows that the literature of West Virginia falls into four large periods, corresponding roughly to the historical periods of the state. The division is evident not only in the subject treated, but also in the general view of life expressed by the various writers—although an occasional writer may be either ahead of, or behind, his age. For convenience, the periods may be divided as follows: 1. The period of exploration and travel into the territory now included in the state, 1669-1823. 2. The period of reminiscences of Indian wars and early literature, 1823-1861. 3. The period of civil war and reconstruction, 1861-1865. 4. The period of statehood and development of natural resources, 1885-1913.

1. The Period of Exploration and Travel, 1669-1823.

The first literature written within the present territory of West Virginia consisted of the diaries and journals of early explorers who crossed the mountains from Virginia or drifted down the Ohio river past our shores. Some of these men were hunters, some were adventurers, some were surveyors locating lands for eastern companies, some were naturalists, observing the fauna and flora of the country, and still others military

men, leading out troops against the French or on embassies of peace to the Indians. A journey into the Great Wilderness was a hazardous undertaking in those days and many of the travellers kept careful journals of their experiences, as much for recording the marvels of this wild western country as for the business on hand.

The result was a literature of mingled fact and fiction—the wildest and most improbable stories of monsters and giants, side by side with prosaic details concerning the depth of the streams and the quality of the lands. It is a literature of naive charm, but its chief interest in our study lies in the fact that these early accounts are the basis of many novels and poems by later writers. Indeed, it is only by courtesy that this first group of writers can be called West Virginians, for though they did their writing, probably, in this territory, only two of all the "journalists" (Patrick Gass of Wellsburg and Lewis Summers of Charleston) were ever residents of the land west of the mountains.

Although the journals were the only written records of this period, there was growing up among the settlers a crude folk-literature of songs and stories, told around cabin firesides or to while away the tedious hours in the forts during Indian uprisings. There were canoe songs and flatboat songs, "love songs about murder," and songs in praise of Monongahela whiskey—which seems to have had a great reputation. There were also marvellous snake stories, grewsome accounts of Indian massacres, many humorous tales of fellow backwoodsmen, and even border epics in which Daniel Boone, Lewis Wetzel and Ann Bailey were as romantic figures as ever were the heroes of Greece and Rome.

2. The Period of Reminiscences of Indians Wars and Early Literature, 1823-1861.

By the year 1823, the present territory of West Virginia was the home of a hardy frontier people, descendants of the many nationalities represented in the tidewater colonies. The hard conditions of wilderness life had been somewhat improved and with greater security and comfort came a fresh interest in books and papers. The Indians had been driven farther West, and, as the men who had fought in the Indian wars grew old, a general interest arose in stories of border warfare. A number of notable collections of these stories were made by residents of the state and became very popular. Among these are Doddridge's "Notes on the Settlement and Indian Wars," Withers' "Chronicles of Border Warfare," Stuart's "Memoirs of Indian Wars and Other Occurances," and Foote's "Sketches of Virginia." Like the journals, these Indian tales have the vigor of first hand contact with a picturesque life, and both in form and content have had an influence upon later writing.

During this period, also, real literature began to be written. The first book of verse, "The Widow of the Rock and Other Poems," by Margaret Agnew Blennerhassett (wife of the unfortunate settler of Blennerhassett's Island), was published in Montreal in 1823. In the same year the first drama, Doddridge's "Logan, the Last of the Race of Shikellemus," based upon one of the frontier tales, was published in Virginia. In 1827 the first

novel by a resident of the state. "The Tennesseean, a novel founded on facts," was published by Anne Royall. This eccentric and brilliant woman was the wife of Captain Royall, an officer of the Revolution, and for nearly thirty years lived near Sweet Springs, Monroe County. After her husband's death she entered upon a journalistic career in Washington, D. C., and is recognized as the first woman journalist of the country. The first novel dealing with life in Western Virginia, John Lewis' "New Hope or The Rescue— A Tale of the Great Kanawha." (1845) is an extremely interesting book, making use as it does of much material from the early journals, but it is not known that the author was a resident.

Among the early poets were Thomas J. Lees, president of Linsley Institute at Wheeling for several years, who published "Musings of Carol" (1831) and "Poetical Works" (1839); Philip Pendleton Cooke, of Martinsburg, who published "Froissart Ballads and Other Poems" (1847), containing the ever popular "Florence Vane," and Thomas Dunn English, author of "Ben Bolt," a resident of Logan County from 1852-1857, who published "Poems" (1865), "American Ballads" (1882) and many other volumes of poetry and fiction, much of it dealing with life in Western Virginia. The journal literature of the first period now developed into the delightful rambling "chronicles" of David Hunter Strother (Porte Crayon) of Martinsburg. "The Blackwater Chronicle" (1853) and "Virginia Illustrated: containing a Visit to the Virginia Canaan, and the Adventures of Porte Crayon and His Cousins" (1871) are both of enduring value and interest. These writers were an important group in their day and several of them are placed among the writers of the nation.

3. The Period of Civil War and Reconstruction, 1861-1885.

With the Civil War there came a great change in the literature of the state. The old order of things was broken up, the people were almost equally divided on the question of secession, and the resulting conflict of neighbor with neighbor entered into their very hearts and feelings. Soon the northern element of the population gained control and seized the opportunity of the war for separation from Virginia. Though probably in the past all the people had resented the political wrongs against them by the Old Commonwealth, the spirit of loyalty to the mother state was strong, and to many the separation was an added cause for bitterness. Feeling on both sides was intense. The writers were for the most part active participants in the struggle, and saw but one side of the questions before the people, yet felt themselves the makers of important history.

Not unlike the early journals are the Civil War tales. They have much the same form, the same dash and vigor—although often marred by partisan feeling. Among these stories are Charles Leib's "Nine Months in the Quartermaster's Department, or the Chances for Making a Million" (1862), "Four Years a Soldier" (1887) by David E. Johnston, of Monroe County, and "The Flying Gray-Haired Yank; or The Adventures of a Volunteer" (1888) by Michael Egan of Parkersburg. "The Flying Gray-Haired Yank" is the diary of a Union soldier who escaped from a Southern prison and made his way on foot to the Union forces in Tennessee.

At the very beginning of this period, Rebecca Harding (Blaine) Davis, of Wheeling, won her first recognition by the story, "Life in the Iron Mills" (1861), a vivid picture of Wheeling at that day. This was followed by "David Gaunt" (1862) a story of the Civil War in West Virginia, and by many later successes. Somewhat later two writers of popular novels published their first stories in book form; Mrs. Alexander McVeigh Miller, of Alderson, "The Bride of the Tomb" (1881) and Frank Lee Benedict, of St. Albans, "My Daughter Elinor." Other prose writers were Sarah J. Jones, of Buffalo, a writer of many Sunday School stories, and Mary Tucker Magill, a native of Jefferson County, the author of several novels and histories.

This period was also very productive of verse. Chief among its poets, perhaps, is Judge Daniel Bedinger Lucas, of Charles Town, who first became known by his war ballad, "The Land Where We Were Dreaming" (1865) and later added to his reputation by the volumes of verse: "The Wreath of Eglantine" (1869), "Ballads and Madrigals" (1884), and "The Maid of Northumberland" (1879) a dramatic poem on the Civil War. His verse shows great metrical skill in the use of many forms of stanza, as well as a firm grasp of the deeper things of poetry.

Col. Buehring H. Jones, of Lewisburg, wrote numerous verses while he was confined in the Federal prison on Johnson's Island, and later published them with other Southern verse in a volume, "The Sunny Land: or Prison Prose and Poetry" (1868). William Leighton, Jr., for many years a resident of Wheeling, was also well known as a poet. He was an enthusiastic lover of Shakespeare, and many of his poems were written in the Elizabethan spirit. Among his poetical works are: "The Sons of Godwin" (1877), "At the Court of King Edwin" (1878), "Change," An Epic Poem (1879), "Shakespeare's Dream," a masque, (1881) and one poem dealing with the Civil War, "The Price of the Present Paid by the Past" (1881).

The passions of the war were long in cooling, but gradually the minds of the people turned to other things and they forgot their secession and separation differences in the newer and more vital problems of the day.

4. The Period of the Development of the State, 1885-1913.

The realization of statehood rapidly brought about a new era in the literature. Before the separation the thoughts of the people turned always toward the East—the seat of government, of power, and wealth of the state of Virginia. But now the people of the West had come into a heritage of their own. The new state, once established, found a vast treasure in her undeveloped natural resources, outside people came pouring into the oil fields and coal mines, many railroads were built, and the people were caught up in the new fever of developing the resources of the state. And with greater prosperity they began to take a greater interest in their history, their neighbors and the many natural beauties of their mountainous country.

Even as early as 1881, George W. Atkinson, at that time a young internal revenue agent, had written a book of sketches of the mountain people—"Among the Moonshiners"—as he had known them in hunting down

"moonshine" stills. The books was immediately popular and led to many later stories of types of West Virginians. Melville Davisson Post in "Strange Schemes of Randolph Mason" (1896), "The Man of Last Resort" (1897), and particularly in "Dwellers in the Hills" (1901) has drawn many pictures of his friends and neighbors of Harrison County. Margaret Prescott Montague's novels: "The Poet, Miss Kate and I" (1906), "The Sowing of Alderson Cree" (1907), and "Linda" (1912) are charming stories of the mountain people of Greenbrier County. Henry Sydnor Harrison, of Charleston, author of "Queed" (1911) and "V. V.'s Eyes" (1912), has also made use of West Virginia material in several short-stories.

Other books by West Virginians dealing with West Virginia life are: Granville Davisson Hall's "The Daughter of the Elm" (1899), a story of the West Fork of the Monongahela; Oren F. Morton's "Winning or Losing?" (1901) and "The Land of the Laurel" (1903) of the mountains of Preston County; Waitman Barbe's "In the Virginias" (1896) a general view of life in the state; Duncan McRa's "The Quaint Family of Three" (1902) of Monongalia County; W. W. Wertz's "Malinda" (1907), of Elk river and the Great Kanawha Valley; and Will C. Whisner's "Mark Ellis" (1899), of Berkeley county.

Besides these there are many authors of general fiction, among them: William Perry Brown, of Glenville, author of "A Sea Island Romance" (1888) and other books for boys; William H. Harvey, of Putnam county, author of "Coin's Financial School" (1892), "A Tale of Two Nations" (1894) and other stories of finance; Katherine Pearson Woods, of Wheeling, author of "Metzerott Shoemaker," "Mark of the Beast," etc.; Callie Bruce Oldham, of Moundsville, author of "Down South in Dixie;" Minnie Reid French, of Bluefield, author of "A Little Court of Yesterday" (1900); Anna Pierpont Siviter, of Fairmont, author of "Nehe"—A Tale of the Times of Artaxerxes (1901); Lena Leota Johnson, of Monroe county, author of "Nonie," a novel (1898); Martin Luther Fearnow of Morgan county, author of "A Modern Crusade" (1899); Bernice McCally Pollock, author of "Hortense" (1902); J. McHenry Jones, author of "Hearts of Gold" (1896), and many others.

Nor has this period been less productive of verse. With the newly awakened interest in things west of the mountains, the natural beauties could not pass unnoticed, and almost every mountain and hill and river and creek of the state has been celebrated in verse of some kind. The picturesque life of the oil districts, the building of railroads through mountains and along precipices, the peaceful and fertile river valleys, the silence of the virgin forests, the sheep and cattle on our thousand hills, have inspired many a local poet.

The state may well be proud of such poets as Danske Dandridge of Shepherdstown—"Joy and Other Poems"—(1888), and Waitman Barbe of Morgantown—"Ashes and Incense—(1891), for both have won general recognition among the poets of the nation. Besides these there are many younger poets who are known to some extent outside the state. Among these are: Frank Preston Smart, of Parkersburg, who has contributed much meritorious verse to the magazines; Hu Maxwell, of Tucker County, "Idyls of the Golden Shore" (1889); Marshall S. Cornwell, of Hampshire

County, "Wheat and Chaff" (1899); Howard L. Swisher, of Monongalia county, "Briar Blossoms" (1899); Emma Withers, of Glenville, "Wildwood Chimes" (1891); Edward B. Kenna, of Charleston, "Lyrics of the Hills" (1902); Ella Maxwell Haddox, of Charleston, "Poems of Sentiment" (1912); Edward Earle Purinton, "The Soul in Silhoutte" (1904); Frances Moore Bland of Weston, "Twilight Reveries" (1900); Virginia Lucas of Charles Town, "Wild Flowers"; Patrick Kenny, "Wayside Thoughts" (1903); George W. Atkinson, "Chips and Whetstones" (1908); and Anna Pierpont Siviter, "The Sculptor and Other Poems" (1903). The list is long and interesting. And scarcely less interesting are the writers of newspaper verse—whose verses appearing from time to time in the newspapers of the state have been collected and printed in book form. Naturally many of these verses are upon subjects of merely local interest, yet there are occasional examples of real poetic feeling. Among such writers are: Robert L. Pemberton and John S. Hall of St. Marys, Dudley H. Davis of Harrison County; Mrs. J. B. Henderson of Williamstown, Ignatius Brennan of Wheeling; Winfield Scott Garner of Tunnelton; John G. Gittings of Harrison county, and Herbert P. McGinnis of Jackson County.

Altogether, West Virginia has reason to be proud of her literature. There are many writers who have won fame for themselves and honor for their state. Very few have written for selfish ends—they have been busy men and women, absorbed in the stirring life of a developing state, and have written from a sincere desire to celebrate their home people in verse or prose. From a review of the history and of the observable tendencies of the times it seems that the beginning of a new period is at hand—a period in which it will be recognized more fully that, great as is the wealth of the state in coal and oil and gas and forests, her greatest wealth is in the varied human life among her hills and mountains, and that there is a beauty of human character quite as real as the beauty of our natural scenery. The new-found material riches will be used more and more for better schools and libraries, new methods of transportation will bring the mountain people into a closer fellowship, and the literary man will be given his rightful place in the life of the state. But whatever the literature of the future is to be, lies with the people, and there is little reason to fear that the coming writers will be handicapped by any lack of heroic themes or of a rich and varied life as a background for the creatures of their fancy.

The Study of Local History

By the Editor.

The importance of local historical research is steadily gaining recognition. This is reflected in a growing belief that local history should have a place in the course of study in our schools. Teachers are discovering that the surest way to kindle and to stimulate to activity the child's atten-

tion is to build on his own experience in his home community life—whose origin and development he will be interested to know. When local life touches the larger streams of national life, local history may be employed to introduce or to illustrate national history. If it has little connection with national life, the history of every local community of whatever age may still be full of vital interest and may be made very instructive. If presented in a systematic, organized course, it is suitable to unfold the fundamental principles of historical development. It contains the universal motives to human action, the universal geographic conditions and influences, the law of development from the simple to the complex, and the evolution of institutions to meet human needs. The common people in their home life, government and industrial interests, have contributed a share to the onward movement of civilization, and a study of the story of their community life will fortify the student with a habit of mind which will fit him to study more intelligently the history of the nation and the world.

The study of history, like charity, should begin at home. The first step, as in geography, is to know thoroughly the home district. The most natural introduction to a knowledge of the history of the world is from local environment, through ever widening circles of interest, along lines that vitally connect the past with the present. The child should first observe systematically the phenomena and processes which lie near to him. He begins this himself and only needs to be guided. He sees the institutions and life of his own neighborhood and is interested in them. In connection with local geography he can learn many things about the society in which he lives, he can get first-hand experience with institutions in the concrete. What he learns in regard to the family, the school, the church, the industrial life and the affairs of local government will aid in giving him a conception of what history is.

Students should be led to appreciate the common and lowly things around them, to understand the familiar facts of local environment whose truths are as significant as those of far-away places and remote times—to have respect for law, and for the institutions which through long ages of the past have been developed in the great school of human experience, and now contribute to the welfare of all. The annals, and records, and life, of quiet neighborhoods are historically important by their vital connection with the progress and science of the nation and of the world.

Local history may advantageously be studied as a contribution to national history and to a larger "world history." Almost every community has some close and intimate connection with general history. Here, the Indians assembled in council and participated in the war dance or smoked the pipe of peace. There, a brave explorer passed centuries ago. Here, a self-reliant pioneer, armed with axe and rifle, built his log cabin and began his mission of subduing the savage forest heavy with the sleep of ages. Through yonder gap pressed the incessant wave of frontiersmen, clearing the way for civilization. Here, in patches of cleared land, strewn with arrow heads, they planted the seed for future harvests. Here, they experimented with the difficulties and opportunities of the wilderness. There, they sprang into conflict for the protection of their

homes; near by is a stone marking the graves of those who died fighting for freedom, and yonder monument is in commemoration of the victory that was won. On every hand, also, are the living monuments of the civilization which followed: the houses, mills, bridges, mines, railways, oil derricks, schools, churches and courts.

In almost every community there have lived conspicuous representative leaders, whose simple stirring lives may be studied as a fitting introduction to the vigorous life and struggles of the common people in bygone days. They represent the men who established, guided and saved the nation. Through them the moving dramatic panorama of the past may be unrolled and glimpses of institutional forces may be given.

The pioneer epoch is a delightful gateway through which the children of our common schools may find entrance to the fields of American history, and of general history. The pioneer life in many states is rich in stirring events, in difficult enterprises, in deeds of fortitude and nobility, in stories of strong men and women, which will thrill the children with delight and awaken a deep and permanent interest. The story of the settlement of almost every community is full of the heroic deeds of the plain, modest and uncelebrated men of the struggling common people—men who sought no praise and achieved no great fame, who were not conscious of their own greatness, but who were ready for any service which was needed to maintain an advancing frontier. They faithfully did a great work, the consequences of which are around us today. While building houses in the wilderness, they were raising the framework of self-governing states. Out of many springs from among the hills emerged at last the irresistible current of their strength. From many unnoticed, scattered fields, where they sowed their seed, came at last a mighty harvest. They toiled not in vain.

The story of the deeds of such men not only awakens human interest, but impresses the mind with the value of high character and purpose, and animates us to do our work with a more intense and patient fidelity. All should be grateful for the invisible, molding influences behind these men: their humble but reverent homes, their simple churches and their rustic schools. The striking phases of their simple, frugal life are full of interest and furnish valuable data for later study of social history and government—their houses, the home life around the great fireplace, their furniture and dress, their meeting houses and long sermons in cold churches, their log rollings, house raisings and husking bees, their government, methods of travel and trade.

The study of such things as these will vivify the past—will "fill its dim spaces with figures which move and live and feel." Our history is rich in inspiring educational materials which, if properly presented, will prevent the distaste for history which has so often resulted from the study of skeleton outlines and the memorizing of tables and dates.

Perhaps local history may find its best opportunity as a means of illustrating in the simplest terms possible the fundamental principles of community life. This idea has recently been applied in the schools of Indianapolis, where it has resulted in the preparation of a series of civic studies on the history of the various institutions of the city, beginning

with a short history of the water supply. Thus local history may be utilized as a means of civic instruction. Because of its usefulness in illuminating fundamental civic ideas, it may find its own opportunity for development in connection with a well organized course in civics. A child is led to see that the various institutions and arrangements of the community have been developed in order to satisfy the needs and wants of himself and other members of the community.

Local history will develop in the child's mind a conception of the nature of community life and its relations. The story of a simple pioneer community shows most interestingly the presence of all the motives and interests of community life and it shows how they were the stimuli for the development of the various phases of early community life and community institutions, such as schools, mills, mines, banks, churches, railroads, streets and government. It shows also how, under the hard conditions of pioneer life, isolated from civilization, the various interests received only partial satisfaction.

The fascinating story of local development from this standpoint teaches its own lesson. It enables one to understand from concrete examples, that society has advanced only by slow, blind groping movements—with long halts and many struggles due to ignorance, stupidity and prejudice—and that "it is only through labor and painful effort, by grim energy and resolute courage, that we move on to better things." The story of each town is one of interesting development: from the primitive and provincial to the modern and metropolitan; from a sleepy condition of mere subsistance and isolation to a life of productive business and communication with the entire world; from trail and pack horse to railway and express train; from an old log house built as you please and surrounded by mud and broken glass to a modern house built by permission of town council, and approached by sidewalk put in by command of the town council, for the general good—perhaps, at first, against the strong opposition of individual citizens; from the dangerous improvised hotel with poor accommodations, unkept and unkempt, to the modern healthy, well-equipped home for travellers; from corner smoke-befogged grocery, with chairs and whittling material furnished to the evening loafers club to an orderly business house where loafers are discouraged inside by lack of chairs and outside by rows of sharp barbs and spikes; from the daily jam of the old post-office after the daily mail hack arrived to the modern office with iron rails to keep the people in orderly line; from the muddy roads of a rural village to the paved streets of a city kept clean by a street-cleaning force; from single poorly organized schools to a system of graded schools, with proper supervision and inspection and culminating in a modern high school; from a few old books read only by a few to a modern free public library; from volunteer bucket brigade to an efficient and trained fire department; from indiscriminate giving and lending to efficient, intelligent organized charity; from the old wasteful Anglo-Saxon method of working the roads to the modern plan of road construction and repair under the supervision and direction of an efficient engineer; from unsanitary springs and wells to the modern system of water works and water purification; from out-door cess-pools to a well-regulated sewer-system; from the old

individualistic method of garbage disposal by throwing in the streets to the sanitary compulsory method of disposing of garbage by city expense and city authority; from pill venders and quacks to a respectable medical profession; from uncontrolled unsanitation to the sanitary control of modern boards of health and to medical inspection in the schools; from a condition of mere drift in everything to an organized system of intelligent direction and control in many things.

The story of each phase of development is instructive and educative. It would certainly be an excellent thing for the development of historical science in America if teachers in our public schools would cultivate the historical spirit in their pupils with special reference to the local environment. Something more than local history can be drawn from such sources.

A multitude of historical associations gather around every old town and hamlet in the land. West Virginia is especially rich in them. There are local legends and traditions, household tales, stories told by grandfathers and grandmothers, incidents remembered by "the oldest inhabitant." But above all in importance are the old documents and manuscript records of the first settlers. the early pioneers, the founders of our towns, and the captains of industries. Here are sources of information more authentic than tradition and yet often entirely neglected. If teachers would simply make a few extracts from these unpublished records, they would soon have sufficient material in their hands for elucidating local history to their pupils and fellow townsmen. The publication of such extracts in the local papers is one of the best ways to quicken local interest in matters of history.

The children should be taught how to study at first hand many of the things which relate to life and mankind. They may be taken to the county clerk's office to see what documents can be found relating to the early history or government of the town, or to the cemetery to read inscriptions on tombstones, or to the fields to find Indian arrows or implements, or to the scene of some battle or some other point of historic interest. They may be requested to inquire at home for old newspapers, old relics, old costumes, old weapons, or for the earlier experiences of their parents. They may be encouraged to make a collection of such things as will illustrate or illuminate the earlier periods of the life of the neighborhood. Old settlers may be invited to talk to the school concerning the hardships of earlier days, or old soldiers may be asked to tell experiences of camp and the battle-field, or men of business affairs may be requested to relate the no less interesting and more useful story of the rise and growth of industries—the story of logging and lumbering, mining and railroads.

In this way a lively interest may be awakened. Another important result may be the formation of a museum of local historical collections, which may be of use to the whole community. Such collections may include relics and pictures of Indians, old costumes, dishes, tools. coins, weapons, etc.; photographs of citizens who have been local leaders or prominent actors in great political and economic events; old letters or diaries, or other manuscript records of the first settlers, or the early pioneers; files of local newspapers; written accounts of the recollections of old settlers and soldiers; books or phamphlets which have any relation

to the locality or to the citizens; written biographies of the first settlers, or of men and women who have been prominent in the community.

These collections and industries may prove a means of kindling historical interest in the community. The people—the town fathers, the fathers of families, and all their sons and daughters—will quickly catch the bearing of this kind of historical study, and many will be willing to encourage it, for it takes hold upon the life of the community and quickens not only pride in the past, but hope for the future. By such systematic work in the most important communities of a county, it would be possible for some trained scholar with the modern scientific, historical spirit to write a good history of the county. And, by such systematic work in all the counties of the state, it would be possible to collect the materials for a good history of the state, the study of which would develop a patriotism far more lasting and useful than the doubtful patriotism artifically created by mere parade and procession, or by mere flag-drill.

Heretofore the use of local history in the education of children has been very unsystematic, and unfruitful of results commensurate with its possibilities and value. I recently submitted to the superintendents of schools in the principal towns in West Virginia a series of special questions concerning the status of instruction in local history in their schools. The replies received indicate that local history has usually meant state history and that it has been taught in the eighth grade—sometimes as an elective in the senior year of the high school—with a text, either as a separate study or in connection with United States history and composition. At Bluefield, it is also taught incidentally in the lower grades. In some instances, as at Parkersburg, some attention is given to local industries and economic conditions. In very few instances has there been any attempt to utilize the history of the community in the schools. This is largely due to the lack of materials in available form.

Such materials might properly be made available through the careful efforts of historical students, either acting independently or identifying themselves with the local historical organizations. In some instances local organizations or public-spirited citizens of means may be willing to appropriate money to meet the situation. By systematic planning and cooperation, all necessary materials for illustrating the development of each community may be obtained.

College departments of history should endeavor to find a means of interesting advanced history students in the field of local history and to enlist them in some phase of local history activity which, under the direction of trained instructors might result (1) in the preparation of useful articles for publication in the newspapers or magazines, (2) in the encouragement of more efficient and valuable research in local history, and (3) in some intelligent plan for the collection of local history in a form suitable for use in the schools of our towns and rural communities.

Since 1903 the department of history at West Virginia University has offered a seminar course on the history of West Virginia—exclusively for advanced history students who are able to pursue cooperative investigations in social economic, political and constitutional development. Such students are given some training in scientific methods of historical re-

search, interpretation and construction, and are encouraged to prepare monographs or briefer articles which will have some permanent historical value. They are taught especially the use of census reports, the documentary material of the state government, old newspaper files and other materials to which they can obtain access at the university library. Efforts are also made to collect materials from other parts of the state. In several instances, students have pursued investigations which required an examination of materials in the department of state archives and history at Charleston.

Since 1906, other efforts have been made to encourage the study of West Virginia local state history, and, incidentally, the collection of old manuscripts, old newspapers, old tools, old maps, old family letters or other historical records which might be of use in securing historical data. In 1909, the head of the department of history published and distributed a suggestive outline for use in the collection and study of local history.

The investigations by advanced students of the University have continued to increase in amount and value, resulting in the completion of several monographs which have been published.

Could not some plan be devised by which state or local historical societies, or state departments of archives and history, would plan their work regularly with a view of aiding teachers and advanced students of American history either in collecting or in publishing? It has too frequently happened that there has not been sufficient contact and cooperation between our institutions of learning and the state or local historical societies. Though occasionally the college instructor consults important documents of the society to aid him in his seminar work, there is no close relation which should exist between the chair of history and the society. What can be done to remedy this situation?

A state or local historical society, or a state department of archives and history, has a wide field of possible activities. Its functions may include: the collection and preservation of historical material, printed and manuscript, public and private; the maintenance of a library and a museum, and perhaps an attractive portrait gallery; the publication of original material and monographs; encouragement of special researches in history; the maintenance of courses of historical lectures; participation in the celebration of local and national events, and in movements for civic betterment or various phases of civic life; aid in the diffusion of historical knowledge; the arousal and maintenance of public interest in local history.

In order to attain its greatest useful development a local historical society should not have too narrow conception of its functions. While the reason for its existence is local history, it should take an active interest in the larger life of the nation with respect to which many topics of local history have their greatest significance. It may become deadened by too close adherence to subjects which have no interest for anybody outside the community. Its meetings may become the property of a few fossilized antiquarians, and unattended by its sustaining members. It cannot hope that its members or its proteges will deal with local history rightly unless their minds are trained in larger American history and can see quickly

the relation of their problems to the history which explains them and gives them significance. With the increase of intercommunication, it must especially endeavor to avoid "fussy fossilized local antiquarianism" and to look chiefly to the larger features of local history or to "American history locally exemplified." It must not use its research and publication funds to further the purposes of those who devote their time to searches for genealogies "to prove their right to entrance into the charmed circle of the Sons of This or the Daughters of That."

Its most valuable function is the encouragement of the collection, preservation, preparation and publication of material illustrating different phases of the history of the state or smaller localities, or its connection with the larger history of the nation and the world.

It should be strenuous in the solicitation of all kinds of historical material. It must endeavor to induce private possessors of documentary material and historical relics, to contribute their possessions to the collections of the society. Through its field work it must endeavor to obtain from those pioneers who have recollections worth recording, detailed narratives of their experiences, of their memories of public men, of the conduct of public affairs, of the social and economic conditions of early times, of course, with full recognition of the limitations of such testimony—gathering documentary materials from persons who will yield readily to appeals by post; getting in touch with early settlers at their periodical gatherings; investigating and securing records of archaeological discoveries; interesting the newspapers and high school teachers in local history, and, in general, awakening within the community an historical consciousness.

A state historical society, or department of archives and history, should be in a position to assist investigators in special fields of local history. To this end it should prepare suitable catalogues, calendars and indexes to facilitate the examination of its most valuable materials, and employ trained custodians who can render intelligent assistance to investigators. It should also prepare and publish lists, and valuations or general descriptions of various county or municipal records which have not been collected. It might undertake the compilation of a suitable guide to materials for the study of local history in all parts of the state. It should encourage the preparation of monographic studies by advanced students in history, and should consult with the college or university departments of history in regard to the preparation of its publications. It should endeavor especially to enlist the interest of students and others who have had special training in history and allied subjects, and who, therefore, have broader historical views than the antiquarians and genealogists whose contributions so often have no practical benefit. It might afford to subsidize the services of trained students of history to prepare monographs which have a special value, or to write local history in a form suitable for use in the schools, or to direct researches for the collection of materials needed in the library. It might also be able to develop a general information bureau which would be of great practical value in responding to calls for statistical or historical facts.

It should make itself useful not only in encouraging historical research

and study, but also in providing for the diffusion of the results of this research and study. It should publish original materials selected with intelligence, arranged systematically and ably edited with finished scholarship; and also valuable contributions by active and resourceful members, or local citizens, or isolated students who desire to cooperate in this kind of work through the local press or local societies and local clubs. Many of these studies, connected in some way with the life of the community, it may use to quicken that life to higher consciousness. If a student, a teacher, a leader of industry or a statesman prepares a paper or delivers an address on some phase of local history. or on some social question, which has a general interest or permanent value, it should encourage him to print it in the local paper or in a local magazine, perhaps in an educational journal, or in pamphlet form. It should also maintain a close touch with the newspaper press and inspire the local journals to publish series of articles on local history. It should cultivate a sound historical interest among the people and should be of practical value to the people.

Unfortunately, while the researches in local history have often been made by local investigators who strolled at random, without any regard to the tenets of historical scholarship, sometimes performing some valuable service, but more often treating isolated subjects of no practical value, the work in the department of history in the colleges and universities has been largely occupied with instruction in the general historical culture which every student should have before he can specialize in a narrower field. Could not the work of historical societies, or state departments of archives and history, and of the college or university departments of history, be readjusted to the benefit of both? After college students have received some training in digesting original material and in weighing evidence, the department could assign them work on the preparation of a thesis which would enable them to secure some experience in original investigation in some field of local history and thus arouse their interest to pursue further work of this kind after the close of their college courses. It is highly desirable that local history should be written by those who have had sufficient training to enable them to give the proper setting for a local event. It seems desirable therefore that college or university departments of history should make a special effort to induce seniors, who have had proper preparation, to pursue a seminar course in which they can secure special training in the preparation of some special study of local history under the personal supervision and direction of well trained instructors. In this way trained students from different communities may be able to arouse a widespread and increased interest in local history which may result in the organization of live local historical associations and the preparation of a series of monographs on local history whose publication will be immediately beneficial to the people of the state. In this way there may be hope that the local field which has heretofore been neglected or left in the hands of untrained workers will be occupied by carefully directed students who approach their work with the broad spirit of those who have a knowledge of the historical development of mankind and are not liable to fall into the absurd conclusions or mistakes of those who work with the merely antiquarian spirit.

The Semi-Centennial Celebration

Inception of the Idea.

The celebration of the semi-centennial of the admission of West Virginia into the Union as a state practically originated from a suggestion of Col. John E. Day, in an editorial which appeared in the *Wetzel Republican* of June 24, 1909, urging a commemoration worthy of the occasion and the commonwealth. The suggestion was followed by many responses of approval from the prominent public men and the press of the state. On October 1, 1909, Governor Glasscock appointed the following public men as members of the Semi-Centennial Commission: Ex-Senator Henry G. Davis, Ex-Senator Charles J. Faulkner, Judge John W. Mason, Senator William E. Chilton, Col. John E. Day, Hon. V. L. Highland, Hon. B. W. Peterson, Hon. Frank P. Moats, Hon. Amos Bright, Hon. Hugh I. Shott and Judge J. B. Wilkinson. Subsequently he added four additional members: Dr. Thomas E. Hodges, President of West Virginia University; Hon. Stuart F. Reed, Secretary of State; Hon. E. A. Brannon, State Senator; and Hon. Edward Thornburg.

Organization of the Commission, and Preparations.

After the legislature of 1911 approved the idea by an appropriation of $10,000, the Commission was permanently organized at Clarksburg, on November 4, 1911, by the election of the following officers: Chairman, Hon. Henry G. Davis; Vice Chairman, Hon. Stuart F. Reed; Secretary, Col. John E. Day; Treasurer, Hon. B. W. Peterson; Historian, Virgil A. Lewis, State Archivist. After the resignation of Mr. Lewis, who, by reason of a serious illness from which he never recovered, was unable to enter upon the active duties assigned to him, this position of Historian was filled by the selection of Dr. J. M. Callahan, Professor of History and Political Science in West Virginia University.

Wheeling, the birth-place of the state, was selected as the place of the official celebration. Its Board of Trade assumed full charge of Wheeling's part of the celebration and cooperated with the Semi-Centennial Commission through a large general committee of prominent citizens. The legislature of 1913 liberally cooperated with the plans of the Commission by an additional appropriation.

To secure state-wide observance of the natal day, by a program of appropriate exercises which would express the spirit of the day and to secure cooperation in the preparation of exhibits for the celebration at Wheeling, a campaign of publicity was begun early in January 1913. At Wheeling special preparations were made for special industrial and civic features which were arranged as a three days introduction to the official celebration of the semi-centennial of the state.

Special Features.

Among the most important special features of the celebration were an educational exhibit illustrating the activities of the various public and

private educational institutions of the state, and the historical exhibits of the Baltimore and Ohio railway. The latter exhibit, showing pioneer cars and engines used on the road, and furnishing an object lesson on the history of the development of engineering, was rendered more realistic by the presence of old-time employes who formerly operated the old engines. The program of June 19 was a fitting introduction to "State Day". A civic and industrial parade of the morning was followed by a military parade and the events of the day closed with a sham battle at the fair grounds in the afternoon and a display of pyrotechnics from barges in the harbor at night. In the military parade appeared soldiers of three generations—the veterans of the civil war, soldiers of the regular army, and University cadets. An appearance of boys in gray with the boys in blue fitly illustrated the obliteration and oblivion of the resentments of the earlier years of the war-born state.

Program of State Day.

The Program of "State Day" (June 20) included a procession, public speaking, a banquet and a ball.

At 1 o'clock a combined military, civic and fraternal procession or pageant—led by the Governor and other state officials, members of the Semi-Centennial Commission, and survivors of the Wheeling conventions of fifty years ago. It passed along the chief streets of the business section of the city, and was viewed by throngs of people.

The chief exercises of the day were given at the grand stand in City Hall park at 2 o'clock in the afternoon, Hon. Henry G. Davis presiding. They included an opening address by Hon. Henry G. Davis, an address of welcome by Mayor H. L. Kirk, a response by Governor Henry D. Hatfield, and brief remarks by Judge John W. Mason and surviving members of the Wheeling convention of 1861. Mr. Davis spoke of the work of the commission, the conditions which determined the formation of the state, and the development of the industries and resources of the state. Mayor Kirk referred eloquently to the natural beauties of the state, the advantage which its citizens enjoy and the progress of development. Governor Hatfield, impressively, and in a clear voice which was audible to everybody in the grand stand, delivered a strong address in which he recalled the debt due the pioneers who struggled for liberty and laid the foundations of present progress, emphasized the duty of the present to preserve and defend the rights and general welfare of the common people, and incidentally advocated woman's suffrage. The applause which greeted many parts of his speech was especially enthusiastic when he said, "The welfare of our fellow men is our first and most sacred charge***** I want to see a more complete exemplification of equal rights to all men ****Human rights must not be sacrificed to property rights."

After the singing of the state song, which followed Governor Hatfield's address, Secretary Stuart F. Reed read letters of regret received by Chairman Davis—one from Governor Mann, of Virginia, and another from Speaker Champ Clark, of the house of representatives.

MEMORIAL ARCH.

Erected for the Semi-Centennial Celebration.

Governor Mann's letter was as follows:

I am sorry to have to inform you that in consequence of the condition of my health it will be impossible for me to be at the semi-centennial celebration of West Virginia.

I regret very much my inability to be with you and sincerely trust the occasion will be all you can possibly desire.

Very truly yours,

W. H. MANN,
Governor of Virginia.

Speaker Clark's letter was as follows:

I would be delighted to be with you at the celebration of the Golden Jubilee. West Virginians have a right to be proud of their commonwealth and the remarkable advance she is making in every way—in education and in population.

I wish you godspeed. The most profitable two years of my life were spent in West Virginia. I look back with unalloyed pleasure upon those years.

Very sincerely yours,

CHAMP CLARK.

Following the reading of these two letters, J. R. Taylor of Chicago, author of the "Ode to West Virginia" was introduced and read his production to the assemblage.

As a fitting conclusion to the meeting, Judge John W. Mason introduced the five surviving members of the historic convention of Washington hall. He spoke briefly as follows:

"A half century is a short time measured by the life of a nation, but it is a long time considered as a part of the life of a man. It is nearly twenty years longer than the average life of an individual. Fifty-two years ago there assembled in this city two conventions—two remarkable bodies composed of about 500 men, taking the two different conventions together. They were among the strongest, the most courageous and the most patriotic men of Northwestern Virginia, assembled for an unprecedented purpose. They performed a great service for their state, and for the Nation, and made imperishable history.

"All but six of those 500 men have been gathered to their Fathers. Five of these six remain and are with us today—John J. Davis, of Clarksburg; George R. Latham, of Buckhannon; William J. Brown, of Grafton; Perry Hale, of Weston, and Alpheus Garrison, of Monongalia County.

"West Virginia delights to do these men honor, and are truly thankful that the Heavenly Father has spared them for this occasion. But one remains—Dr. W. L. Grant, of Grafton. He is kept away on account of ill health. It is not likely that we shall ever have the pleasure of greeting these men together again. The time is not far distant when many of this audience will read in the papers of the day an account of the death of the last man of this historic convention of May and June, 1861. It may then, my friends, be a pleasure to you to remember that you have seen some of these men. It may strengthen your patriotism and inspire in you an ambition to emulate their noble conduct, should the occasion ever require it."

At the conclusion of these remarks, Mr. Mason introduced the five aged men, each of whom responded with a short talk to the audience.

At the close of the meeting all of the honored guests were driven to the fair grounds to witness a sham battle between the Cadets and the Regulars.

Chief "State Day" Addresses

ADDRESS OF HON. H. G. DAVIS

Ladies and Gentlemen:

As Chairman of the Semi-Centennial Commission, it becomes my privilege and duty to preside at these exercises in commemoration of important events which occurred in this city fifty years ago, when there came into existence a new Sovereignty—a new member of the sisterhood of States that make up this great and wonderful nation. The official notice should be taken of the Fiftieth Anniversary of the admission of the State was to be expected and the Governor appointed a Commission, composed of fifteen prominent citizens, to formulate plans and direct the preparations for a fitting celebration of the event, towards defraying the expense of which the Legislature appropriated thirty thousand dollars. While the patriotic spirit awakened would be felt by all the people of the State, it was recognized that there should be some place upon which to center the more important features of the Celebration.

Wheeling Selected.

The Commission weighed carefully the considerations advanced in behalf of different cities and selected Wheeling as being the most appropriate, practically all the steps in the formation of the State having been taken here and it having been the first capital. Her citizens were enthusiastic in their desire to show by their works the appreciation of the historic value to them of these early scenes, and well have they done their part. They have devoted their time and means and best talents in their untiring efforts, and what we see here today is the best evidence of their complete success. That no mistake was made in the selection of Wheeling for the official ceremonies is patent to all.

Celebration State-Wide.

The Commission felt that the Celebration should be State-wide, and, while lending its aid in all particulars to Wheeling, it has encouraged as far as possible the holding of approriate services in all parts of the State. To this end the day has been made a State holiday and so proclaimed by the Governor. Financial assistance has been given by the Commission to the county seats. National and State flags have been sent to the 8,000 and odd school houses in the State, and the people urged through Boards of Trade, Chambers of Comerce and other civic organizations to hold meetings with services appropriate to the day. The fraternal and benevolent Orders have been asked to take proper action, railroads have been requested to recognize the anniversary by decorating their trains and stations, and appeal has been made generally to all classes of citizens of the State in some way everywhere to make the day memorable. The Commission, through a Committee from the State University, selected from a large number of contestants a song and music and a monograph composed especially for the occasion, which have been printed and widely distributed and will be sung and read here and elsewhere throughout the State. Under the direction of the Commission, a souvenir volume is being compiled which will be published in due time and contain an accurate history of the State and its resources and development at the end of the first fifty years of its existence. In a number of other ways the Commision has sought to carry out the purposes for which it wae created, and trusts that its labors have not been in vain. It believes that the people generally will appreciate the significance of the exercises here and elsewhere, that they will serve to increase pride of citizenship, awaken the spirit of patriotism and add to the mental and spiritual stature of all. And, as we proceed with the observances of the day, let us for a moment look back to the beginning of the period we celebrate.

Formation of State.

Momentous were the issues and tremendous the results of the Civil War, but the only change wrought in the map of the country was in the creation of West Virginia. The Act establishing the State was approved by President Lincoln on June 20th, 1863, and West Virginia stood apart and alone from the old State. It was with saddened heart in times of stress that she saw her youngest daughter depart and go her way. A few years later she learned that the estrangement was

only temporary and that with growing strength and vigor the offspring by her side stood steadfast in its affection and pride for the Mother State. The change was made during the days of heroic deeds and when the pages of history were being rapidly turned. The men whose faith and strength of purpose carried them forward to the formation of the State in times of great doubt and foreboding, are those to whom we now pay homage. We come not so much to recount our achievements and to enjoy hte sensse of satisfaction they impart, as to do deference to the memory of those who made possible the occasion of our pride. They builded better than they knew by bringing into being a State which, unlike themselves, lives on and gathers strength as the years multiply, and yet while they live has grown greater than they anticipated, richer than they prophesied, stronger than they imagined, and more than fulfilled their brightest hopes.

The physical features and natural riches of West Virginia have always been attractive and illusive. The adventurous spirits of the colonial times found pleasure and excitement in the chase within her borders, and pioneers discovered in her woods and hills, her mountains and valleys and encircling waters, the essential ingredients of future empire; the pathway of progress was made through struggle and adversity, and her early settlers were impelled by the obstacle they had to overcome. He who laid the foundation of the Nation, the Immortal Washington, in the days of his early manhood within her borders set courses and distances in engineering endeavor. The time is not now sufficient to bring before us the names, growing brighter by the polishing effects of time, of the illustrious men who have been her sons or patrons. They are entwined in her history and have given her strength in her infancy and prestige and power in her fuller life. It has been five decades since the star of West Virginia first appeared in the National emblem, and it is by these periods of time we are apt to compare our political life and growth.

Geographical Location.

At the time of her admission into the Union, she was, and is now, smaller than any of the States to the West of her, and, notwithstanding this, her irregular form unables her to reach well in between Ohio and Pennsylvania, to within one hundred miles of Lake Erie, while but fifty miles separate her from the Capital of the Nation, and down to Kentucky her borders go. She stretches forth her arms to the North and East, and in sisterly friendship unites the great Northern and Southern States, between which she lies. She has been described as the most Southern of the Northern States, and in this happy mien she derives the best qualities of both.

The peaks and pinnacles and terraced mountain sides divide and distribute her waters with impartial favor. They give birth to the Potomac, which broadens into service for the Capital of the Nation, and mingle in the Chesapeake with those which have gone down through the historic James; to the North by the Cheat and Monongahela they reach at Pittsburg the Ohio and soon join with the waters from the Southwest of the Little Kanawha. Nature has furnished the lines of a great portion of the boundaries of the State in mountains and streams, the Ohio River alone serving her well for nearly three hundred miles along her border. The people of the State have inherited from its rugged nature a spirit of freedom and self-reliance. They have cared rather for the independence of its hills and valleys than the interdependence of cities and towns.

Population.

In 1860, about the time of the formation of the State, and the nearest figures thereto available, the population was 376,686, or about fifteen persons to each square mile. In 1870 it had grown to 420,014, and in 1910 it reached 1,221,119, or an average of fifty persons to each square mile. It had a little more than three times the population of fifty years ago, the actual increase being 324 per cent, and of 276 per cent from 1870. The percent of increase in the last decade was greater than in any other ten years since 1880, and was one-third greater than the average of the United States. The population in 1860 was seventeen times and in 1910 twenty-two times as much as it was in 1790. In 1910, compared with 46 per cent for the entire country, only 19 per cent of the population of West Virginia lived in cities; nearly a million of its people living in the country, and, notwithstanding this, five of its cities increased in size over 100 per cent in the ten years from 1900 to 1910. West Virginia's progress in numerical strength is largely within herself. Although her mining industries are uppermost, she has had little help from immigration, of her total population but 4.7 per cent are foreign born, 95.3 per cent being natives of the United States, and 80 per cent saw the first light of day within her confines. Four out of five of her people, therefore, are native born, and but one in twenty came from foreign shores. 94.7 per cent are white and 5.3 per cent are colored.

Agriculture.

It might be said that her mineral deposits enlarge her area, as in many instances with thousands of acres of valuable coal seams beneath, the surface is cultivated and fruitful. Two-thirds of the State is in farms, their number, acreage and value compared with 1870 are as follows:

	1870	1910	Per Cent of Increase
Value farm property	$96,714,190	$14,736,540	225%
Land in farms (acres)	2,580,254	5,521,757	114%
Number of farms	39,778	96,685	143%

There are in round numbers one hundred thousand farms in the State, and they each have property worth over three thousand dollars.

Manufactures.

In 1910 there were 2,586 manufacturing plants, nearly half of which were working in lumber and forest products. Their capital was $150,923,000, not quite half the value of the farms. They employed 71,463 persons, and the value of their products was $161,950,000.

Mining.

It is in mining that the State is making its most rapid industrial progress. In 1863 it produced about half a million tons of coal, an average output now of about three days. At that time its oil and gas production was inconsiderable—now it is first in the production of natural gas, first grade oil and hard woods, and second in coal and coke, Pennsylvania alone surpassing her. Her output of bituminous coal compared with that of Pennsylvania for several years past in net tons was:

	W. Va.	Penna.
1902	24,570,826	98,574,367
1907	48,091,583	150,143,177
1912	68,320,000	159,922,449

Per Cent. of Increase.

	1902 to 1907	1907 to 1912	1902 to 1912
Pennsylvania	52	7	62
West Virginia	95	42	178

For the five years following 1902 West Virginia's per cent of gain was nearly double, for the ten years since 1902 it was nearly three times, and for the last five years six times that of Pennsylvania.

In 1902 Pennsylvania mined four times as much bituminous coal as West Virginia; in 1913 it was less than two and one-half times as much.

West Virginia has 826 separate mines, 59 of which are each producing over 200,000 tons annually, and they all give employment to over seventy thousand men.

Since coal mining began in the State, West Virginia has produced 649,448,201 tons, over one-tenth of which was produced in the past year. In 1912 West Virginia furnished about one-sixth and Pennsylvania about one-third of the entire production of the United States. West Virginia has a greater amount remaining of untouched available coal than Pennsylvania, the estimates by official sources being 149 billion tons for the former and 109 billion tons for the latter.

Wealth.

Since about the time of the formation of the State, its total assessed value has grown nearly ten fold, it being $126,060,743 in 1867, and $1,114,000,000 in 1911.

Statistics of great variety could be produced to show the health and prosperity of West Virginia, her present high position, her rapid advance in all the material and moral affairs of life, the happiness and ambitions of her people, but facts are for moments of greater care. Today we put aside the sterner realities of life and lend our thoughts and feelings to the spirit of the occasion. We join with our

neighbors and friends in making merry, that we can with light hearts and cheerful mien fittingly observe the day we celebrate. The State was born in sentiment, and in sentiment let us remember its birth. In our felicitations on West Virginia's fiftieth birthday, an occasion fraught with pride in the accomplishments of the past, let us take advantage of the golden opportunity and inaugurate to higher hopes and greater aims the second half century of the State's history.

ADDRESS OF MAYOR H. L. KIRK.

"My friends, mighty things have been worked out in this, one of the youngest states of the union. A point which was yesterday invisible is the goal of today and will be the starting point of tomorrow. We look into the future and hail the coming of the morn, radiant when this beautiful world which we now inhabit will be ablaze with a radiant splendor of new discovery, which would blind the eyes of those now living were they in their fullness to break in upon us. It seems to me, my friends, that more particularly today than in any other period of the state's history are most manifest all instrumentalities for the bettering of the human race. May the lightning spare the walls of our glorious state and may peace like a ministering angel, and like the shadows of the centuries continue to be upon our splendid Ohio valley, the richest of all the great valleys of the earth.

"The possibilities of this valley are incalculable, its wealth, like that of Croesus, can not be estimated, and its inhabitants are among the noblest, manliest and bravest people today beneath God's sunshine. We are in the business of doing things ourselves; we aren't by any means lying supinely on our backs up here in our West Virginia hills. We are digging coal at a mighty rate, the familiar click of the miners' picks are daily heard in many of our mountain sides as they bring forth the dusky diamonds which bring millions of dollars in our pockets every year. The hum of the mill saw lulls our mountaineers to sleep and awakes them from their slumbers at the dawning of the morn.

"We are pumping oil in sufficient quantities every day out of our West Virginia hills to grease all the axles on the earth and have enough left to lubricate the North Pole, and oil the hinges of every industry in the world. Moreover, we have most everything else up here, including the best people beneath the stars. We are just beginning to appreciate in its fullest the true grandeur of our little mountain state, under whose flag all classes and races of men can walk erect in the dignity of unrestricted freedom. Thank God in our great state no man owns another, and better than all, labor is forever free.

"We shall soon return from here, my fellow citizens, to our various avocations, the storms as they come and go will beat upon the walls and all about us. Let us hope, my friends, that the lightning shafts will spare this edifice of today and may God's blessings be showered upon our state. May faith and peace and good will toward men shed their influence upon the officers who shall occupy its portals and sit beneath the dome of our state, and may the shadow of the centuries gently hover over the work we have done today.

"And now, my friends, I wish to say that this welcome will be felt by us and uttered by me in vain, if you fail to realize its sincerity or fail in the relaxing periods of this assembly to enjoy every hour and every minute of your stay with us. And when you go hence we want you to carry the one thought with you, if there is one place in the reign of your activities where the home sense, the sense of friendship, is abiding and sincere, that place is the city of Wheeling, for in deed and in truth you are our welcome guests.

"I now welcome you in the name of the great mountain state, West Virginia, in the name of the most progresive city in the state, Wheeling, in the name of every citizen, great and small. I want to say to you that you are now and ever will be our welcome guests."

ADDRESS OF GOVERNOR H. D. HATFIELD.

"Fellow Citizens of Wheelinng and Throughout our Commonwealth:

"We are assembled here today to commemorate the achievements of the fathers of two score and ten years ago. * * * No words can adequately express, or tribute pay, to the grand men who fostered the inspirations and dreams of a new star to the commonwealths of this republic, and at a time in our nation's life when wreck and ruin threatened our own national existence from internal strife among the same citizenship, the same kin and kindred, who a few years previous to that had shouldered their arms to meet a foreign foe, always doubled and sometimes five times their number.

"I would like to call each patriot's name that participated in the formation of our state, but as that is a physical impossibility, I shall be content with mentioning none, as all should be mentioned and due homage paid to each and every one regardless of his position in life, just so he possessed within his manly bosom the inspiration of the stalwart mountaineer.

"These men gave to us an empire of natural wealth, which commonwealth could be aptly termed the supreme goddess, when it comes to discussing the accumulative energy in its crude form, indispensable to the toilers and delvers in the workhouse of Vulcan, which makes possible the motion of the countless wheels of industry that support myriads of people in every vocation of life.

* * * * * *

"What if the fathers could come back and view the years passed since their time and see the wonderful developments in the way of railways, the magnificent coal breakers, with the oil and gas, and all of these natural resources found in almost every section of West Virginia, surpassing in quality almost any other state in the union; the glass factories, tin plate, iron and nail manufactories. I am sure they would be amazed at our accomplishment, but we would be criticised by them, and justly so, for the great waste we are permitting of these great and boundless gifts of nature.

"Gentlemen, we are West Virginians. I am for my state and its citizenship. The welfare of our fellow men is our first and most sacred charge. I want to see each and every man have an equal show with his fellow. I want to see a more complete exemplification of equal rights to all men and that line of demarkation which defines the right of men toward their neighbors. These rights must not be abridged and they shall not if I can prevent it. Human rights must not be sacrificed for property rights. The rights of men are the most sacred. The transgression of this principle makes a pitiful picture indeed if we will follow it from the dark ages down to the present time. The one principle and the basic foundation upon which all superstructure rests in the compilation of this great republic of ours is that principle of human liberty and human justice.

"The pathetic picture to which I have just referred of suffering envy, misery, torture, scandal, persecution and misrepresentation of human acts and human rights has been the cause of more wars, the sacrifice of more human lives, the filling of our jails and penitentiaries in the hope of the persecuted to free themselves from the chains of oppression. These oppressions are due largely and more especially to the acts of those who cherish ambitions for preferment, and are willing to misrepresent the position and character of any one who supplants them, and have a ready ear for sensations and flash them upon the messenger wires which go to aid, comfort and more fully guarantee the purpose of the designer. Again we have greed, avarice and the blind, unbridled, merciless, selfish ambition of those who are in search of riches.

"I would rather spend the rest of my life in a hovel, not unlike my past seventeen years as a professional man, giving what assistance I could to the comfort of the poor and to those who have not had the advantages most of us here present have had. I would rather occupy this position, my fellow citizens, than to have at my command all that wealth could procure and occupy the position in life where I should deny my fellow men of the God-given rights which are due the weak and lowly.

Keep Resources at Home.

"We have accomplished much in the past fifty years, it is true, but let us enter into a new compact as West Virginians and stand for our commonwealth as no other generation of people have done. Let us indicate in a friendly manner and in an economic way what will be mutually beneficial to the citizenship of our state and to the owners of our natural wealth and call a halt to the transportation of these great natural resources to other states, where our raw material is now being conducted, there to be converted into energy which propels the numerous wheels of industry of the manufacturers of finished products, some of which are returned to our own state and sold to its citizens.

"Why not avail ourselves of these advantages and use our influence to bring about a unity of feeling and action, to induce the manufacturer to establish his business in our own commonwealth, which will guarantee to us a greater population and a wider influence.

"Let us perpetuate this natural wealth for future generations. Let us say to the manufacturers, We welcome you to our midst with your industries. Let us join hands for a united effort as loyal West Virginians to bring about an empire of industry of the finished product class throughout the lenght and breadth of our state. Why should this not be done? Gentlemen, I am willing to contribute liberally to this cause and to make any sacrifice necessary for a greater and more glorious commonwealth.

"Dedicated as she was to liberty and equity, let us not forget the lesson of the fathers. A concerted effort on our part will bring about an awakening and relieve the unrest and smouldering condition which is both visible and audible in every recess throughout our state.

"Every human being, by divine teaching, is our brother; his rights by law are equal to our own; the liberty and privileges of all men should be equal. Some of us, I am sorry to admit, have not conceded these principles or adopted the teach-

ings of the fathers as the basic fabric upon which we should stand toward our fellow man. It must be so in the future if we are to realize the ambitions and perpetuate the good name that was left for us by the fathers of fifty years ago. The rights of all men are equal; no race or color, no previous condition of servitude, can change the rights of men if the Declaration of Independence, with its adopted amendments, is literally construed and carried out in letter and in spirit.

* * * * * *

"It was Lincoln who stilled the storm after a long, direful struggle between patriots who were always ready to shoulder their arms against a foreign foe. It was due to his foresight and almost superhuman strategy that made possible a greater and stronger North American republic. A grand nation, commencing at the Atlantic and going to the Pacific, you will find a continent of happy homes; three million people have increased to one hundred million.

"Liberty and labor have been the foundation stones upon which all of our accomplishments have been achieved. Let us go forward in the great work of the future, imbued with the one principle that all men have equal rights. The man acts well his part who loves his fellow men the best; who is most willing to help others; who is truest to obligations, has the best heart, the most feeling, the deepest sympathy, and who freely gives to others the right that he claims for himself.

"Let us join hands for a greater and more glorious commonwealth and use as our motto 'Liberty, Fraternity and Equity,' the three grandest words of all. Liberty gives to every man the fruits of his own labor; fraternity, every man of right is my brother; equity, the rights of all are equal. Let us go hand in hand for a better commonwealth. We have just begun. West Virginia stands on a pedestal where she can command obedience from all other states as far as natural resources are concerned. I stand with you the great common people of West Virginia."

Ode to West Virginia

By J. R. Taylor.

As a house that is builded with labor,
  With life and with love and with tears,
Having danger and death for a neighbor,
  Made strong with the hands of the years;
As a dream that is builded with yearning,
  More sweet than the frannkincense spilt,
More bright than the sunset that's burning
  E'er so wert thou built.

As a home that is touched with the sadness,
  Of those who have loved us and passed;
That echoes e'en yet with the gladness
  Of childhood and innocence vast;
That fills us with memories pleasant,
  Though far from the vision remved,
'Till the past is half-merged with the present,
  E'en so art thou loved!

As a mountain, cloud-dim and sky-crested,
  That looks o'er the level below,
It's sides with Srping's magic invested
  While the summit is sparkling with snow:—
Majestically, lovely, unchanging,
  A tower to the uttermost land,
Allure to the spirit far-ranging,
  E'en so dost thou stand!

As the future that stands in the distance,
  Sunbright 'mid a splendor of sheaves,
And beckons with smiling insistence
  The courage that hopes and believes;
As the future that waits but the coming
  To yield to the comer it's all,
Wealth, thought and great industries humming,
  E'en so dost thou call!

As a state where God's freedom is cherished,
  A shrine where man's thought is preserved,
A land where all rancor has perished,
  A place where humanity's served;
A field where all human endeavor
  Shall broaden and prosper and live,
Loved home of our fathers, forever,
  E'en so shalt thou live!

The Banquet.

In the evening, at 6:30 o'clock, a banquet was given at the Scottish Rite Cathedral. The banquet hall was prettily arranged in potted plants, palms predominating, and in cut flowers, a basket of beautiful roses adorning each table. As the guests entered the hall, Meister's orchestra played the strains of the new state song. A few minutes after the other guests were seated, Governor Hatfield and ex-Senator Davis entered and amidst an ovation were escorted to the speakers' table.

The following menu was served:

Caviar Canape a la Russe
Olives — Salted Almonds — Celery
Chicken Essence En Tasse — Fresh Crab Meat, a la Newburg
Larded Tenderloin of Beef a la Clamart
New Peas — Potatoes a la Parisenne
Creme De Menthe Punch
Roast Royal Squab, a la Polonaise
Iced Nesselrode Pudding — Assorted Cakes
Roquefort Cheese — Bent's Crackers
Demi Tasse De Cafe Noir
Stratford Magnesia Spring Water — Stratford Ginger Ale
Cigars.

The following is a list of the guests:

Richard Robertson.
H. S. Martin.
Dr. E. A. Hildreth.
M. L. Brown.
J. A. Blum.
J. J. Holloway.
Joe Holloway.
W. W. Holloway.
O. G. Beans.
Harry Clayton.
Harry C. Hervey.
Howard Sutherland, Washington, D. C.
U. B. Williams, supt. B. & O. R. R. Co.
Dr. I. C. White, Morgantown.
Geo. A. Laughlin.
Dr. J. M. Callahan, Morgantown.
Wm. P. Hubbard.
Samuel V. Woods, president state senate.
H. W. Gee.
Prof. H. M. Shockey.
T. S. Riley.
John A. Hess.
J. W. Dawson, Charleston.
W. E. Stone (2).
Daniel Willard, pres. B. & O. R. R. Co.
Seaton Alexander.
Geo. B. Woods.
A. E. Schmidt.
Russell Irvine.
W. B. Irvine (10)
Geo. W. Lutz.
H. L. Kirk, mayor.
G. O. Nagle.
W. H. Colvig.
Fred J. Fox.
W. S. Brady.
Jas. W. Ewing.
Alexander Glass.
Randolph Stalnaker.
F. L. Committee, Elm Grove.
O. S. Marshall, New Cumberland.
R. B. Naylor.
C. A. Robinson.
George Heard, Pittsburg, Pa.
A. S. Hare (2).
J. G. Hearne.
A. B. Paxton.
A .F. Brady.
John Coleman.
George Baird.
David Kraus.
John T. McGraw, Grafton.
Henry N. Hess.
J. C. Brady.
J. E. Morgan.
C. E. Peters.
G. E. Lawyor.
C. N. Hancher.
D. G. Brown.
H. E. Dunlap.
Peter Barchman.
Chas. Bachman.
Lewis Bachman.
A. T. Sweeney, S. O. C.
Wm. A. Hankey.
Geo. E. Stifel.
H. S. Sands.
W. E. Rownd.
S. C. Driehorst.
A. T. Hupp.
Hal. Speidel.
R. M. Addleman.
C. W. Bates.
Arch Wilson.
W. P. Wilson.
J. B. Taney.
Otto Schenk.
H. C. Ogden.
C. H. Copp.
Rev. Jacob Brittingham.
Dr. W. S. Fulton.
H. M. Russell.
J. N. Vance.
H. C. Franzheim.

Ben S. Baer.
Eugene Baer.
Elmer Hough, Wellsburg.
T. B. Sweeney.
John H. Clark.
A. G. Martin, Fairmont.
F. F. Faris.
Geo. Craig.
Baird Mitchell.
E. W. Oglebay.
Geo. E. House.
A. W. Paull.
Samuel W. Hartman.
L. E. Sands.
C. W. Jeffers.
Robert L. Boyd.
Dr. J. L. Dickey.
C. B. Taylor.
B. Walker Peterson.
S. Bruce Hall, New Martinsville.
Frederick Gottlieb, Baltimore, Md.
H. G. Bills.
Maj. J. G. Pangborn.

H. F. Behrens, Jr.
Edgerton Vance.
A. F. Ulrich.
W. R. Keyser.
Chas. Voitle.
Lloyd Eneix.
Capt. Leery, U. S. A.
A. C. Whitaker.
R. A. Goshorn,
Pittsburgh, Pa.
Dr. S. L. Jepson.
Robert Hazlett.
F. L. Ferguson.
R. E. Byrum.
Geo. W. Eckhart.
Edward Wagner.
W. G. Creamer.

Hon. Howard Sutherland, congressman-at-large, of Elkins, presided as toastmaster. Addresses were made by Hon. Henry G. Davis, Governor Hatfield, George M. Shriver, second vice president of the Baltimore & Ohio railroad; Major J. H. Pangborn, also of the B. & O.; Congressman John W. Davis, Judge John W. Mason, of Fairmont; Senator Sam V. Woods, Hon. Wm. P. Hubbard and H. C. Ogden.

Senator Davis in a kindly manner expressed especially his appreciation of the cooperation of Wheeling in the preparation and management of the celebration. Governor Hatfield spoke especially of the earlier struggles and present problems of the state, referring to the accomplishments of the fathers who builded and of the great resources for which he pleaded the necessity of conservation. He brought all the guests to their feet when he proposed a toast in ginger ale, to Wheeling, "the best city in the state." A moment later, he proposed a similar toast to Senator Davis and this also was drunk standing.

Governor Hatfield complimented the citizens of Wheeling, too, on the grounds that they have stood, always, he said, for progressive legislation and at a time, two, when the legislatures were not disposed to lend a willing ear. At this time, however, he stated, the laws which Wheeling legislators demanded two years ago are being enacted. He urged economy along all lines and closed by thanking the citizens of Wheeling for their support in administering the affairs of the state.

Judge Mason briefly spoke of his creed in optimistic vein which evoked hearty applause. Expressing his opposition to "the knocker", he said he believed that this old world is the best place in creation, that this hemisphere is the best place in this world, that America is the best place in his own ward is the best ward in Fairmont. Mr. Shriver's address was this hemisphere, North America is the best of all the Americas; that the United States is the best part of North America, that West Virginia is the best part of the United States; that Marion is the best county in the state, and that Fairmont is the best City in Marion county, and that both retrospective and prospective in its treatment of the relations of the Baltimore and Ohio railway to the development and prosperity of Wheeling and West Virginia. He properly referred to this railway as a most important factor in the founding of the new state.

Major Pangborn, who did so much toward making the company's exhibit one of the big features of the celebration, was introduced at this point and spoke for five minutes in a pleasant vein. He caused a laugh when he stated that he was one of two men who started with the first engine toward Wheeling and that he had stood, throughout the trip, on the rear step, in order to be in a position "to take to the woods" in the event that anything happened.

Congressman Davis responded to the toast "West Virginia" in a bril-

liant and pointed oration, closing with an exhortation to answer the knock of opportunity. Senator Woods, after briefly extending his felicitations, pictured a future Wheeling whose creek would be a culvert and whose hill would be cut away and be replaced by a magnificent boulevard.

Mr. Ogden spoke of the influence of the newspapers in the formation of the state. In this connection he paid a deserved tribute to the late Archibald W. Campbell, the late John Frew and others.

Hon. W. P. Hubbard, after brief reference to the spirit of the occasion, appropriately introduced a letter of Waitman T. Willey to C. D. Hubbard, written at Morgantown on May 6, 1861, and expressing confidence in the ultimate formation of a new state by constitutional methods.

The Ball.

The social events connected with the celebration were closed by a ball which was attended by notables from different parts of the state. A feature of the evening was the attendance of the West Virginia University Cadets, who were the guests of Hon. Earl W. Oglebay.

The tumult and the shouting dies—
The captains and the kings depart—
Still stands Thine ancient Sacrifice,
An humble and a contrite heart.
Lord God of Hosts, be with us yet,
Lest we forget—lest we forget!

. . . . . .

Lo, all our pomp of yesterday
Is one with Nineveh and Tyre

. . . . . .

All valiant dust that builds on dust—
And guarding calls not Thee to guard—
For frantic boast and foolish word
Thy mercy on Thy people Lord!

—*From Rudyard Kipling's "Recessional."*

Coat of Arms, State of West Virginia.

The joint committee on state seal, appointed by the first West Virginia legislature, in 1863, was composed of Peter G. Van Winkle of Wood County, L. E. Davidson of Taylor County, William L. Crawford of Hancock County, Daniel D. T. Farnsworth of Upshur County, Edwin Maxwell of Harrison County, and Greenbury Slack of Kanawha County.

The Great Seal of West Virginia

By Hon. Stuart F. Reed, Secretary of State.

When the morning dawn of June 20, 1863, fell silently on the mountains and valleys of West Virginia, the state had no organized government. Before the shadows of evening fell a legislature had been organized and the first governor and other state officials had been inaugurated at Wheeling, the state's first capital. It was a day of banners and flags, speeches and songs, parades and huzzas.

The state's natal day fell on Saturday, and on the following Monday, June 22, the legislature met to begin real work. There was a government then, but the new child of the Republic had no seal or coat of arms. The

OFFICERS OF THE WEST VIRGINIA SEMI-CENTENNIAL COMMISSION.

HISTORIAN OF THE SEMI-CENTENNIAL COMMISSION.

second joint resolution, therefore, to be adopted was one authorizing the appointment of a committee to "devise and report suitable devices and inscriptions for the seals of the state." The committee went immediately to work, employing J. H. Diss DeBar, of Doddridge County, to make drawings in compliance with their suggestions. The design agreed upon was finally adopted in September, 1863, and the state was then ready to attach her Great Seal to the numerous documents which by law and long custom were considered incomplete without such insignia.

The words "seal" and "coat of arms" in the United States have practically the same meaning. When the design is impressed upon state papers or public documents, is is referred to as a seal, and when it is used for illustrative purposes or on flags, it is usually called a coat of arms.

The history and traditional significance of these emblems of nations and of states constitute one of the most interesting subjects in the story of civilization. We of the territory of the thirteen original states have no difficulty in tracing that strain of heraldic reverence that causes us unconsciously to make our state coat of arms in some way a symbol of our state pride and patriotism.

When the Revolution was over and Washington and his armies had gained our independence, the "American Eagle and Shield" took the place of England's "Lion and Unicorn." The spirit of ancient heraldry remained but much of its ancient glory had fled.

England, under Richard III, established a College of Arms in 1483, which institution exists today to guard the history and traditions of her cherished heraldry and settle all questions relating to Coats of Arms or her Great Seal. America has been too busy to do anything like that, and the seals of many of the states are, through carelessness and inattention of engravers and printers, changed as the years go by.

West Virginia's beautiful emblem did not escape this reckless law of variation. Year by year changes were made until many of the state's lithographed forms were decorated by caricatures that bore but little resemblance to the original drawing of Mr. Diss DeBar. In some of these engravings of the obverse side of the Great Seal of West Virginia, the sheaf of wheat and the lumps of mineral had been omitted; the wild ivy had been taken from the rock; the axe had been transformed into a maul, the miner's pick had lost its identity and the two human figures had assumed garbs the like of which never haunted even the wildest dreams of the committee which submitted the original design in 1863.

In 1910 the secretary of state began to send these burlesque engravings to the junk pile and the new blanks and forms are beginning to show a West Virginia Coat of Arms which seeks to preserve the beautiful conception of the fathers of the state as expressed a half century ago.

To many people the preservation of our Coat of Arms, as originally designed, would seem a trivial matter. We Americans live in a commercial environment, with but little time for sentiment, while Great Britain, with a domain upon which the sun is said never to set, reverences her ancient seal because it combines the past and the present.

England's Coat of Arms is a summons to the dead of eight centuries to walk again through her abbeys and palaces. The poet's song and the

soldier's fame make sacred and beautiful this mystic emblem of her sovereign will. It has held carnival and parley with thirty generations of England's fair women and brave men and has been an actor in the grandest episodes of her history.

Says a noted English writer, "No charmed life of fairy love surpasses in wonder and incredible incidents the life of the Great Seal. It has smiled at the feasts of kings and starved in garrets. In vain have earth, fire, air and water banded together for its destruction. Once hurled into the Thames it invoked the aid of a waterman and was restored to the King's House. Thieves have stolen it and melted it down, and sold it for old metal. It has been buried beneath the ground. Over and over again, ruffians, armed with murderous instruments, have broken it into minute pieces, but still the Great Seal remains, entire, beauteous and flawless as ever."

HISTORICAL NOTES.

The report of the Committee on State Seal for West Virginia designated a seal with an obverse and a reverse side, to be used when the Coat-of-Arms is made in the form of a medallion. As a matter of fact, the seal used for State purposes shows only the obverse side.

The description given by the Committee for the Great Seal is as follows:

Obverse Side.—"'The obverse to bear the legend 'State of West Virginia,' the Constitutional designation of our Republic, which, with the motto 'Montani semper liberi,' ('Mountaineers are always free') is to be inserted in the circumference. In the center a rock with ivy, emblematic of stability and continuance, and in the face of the rock the inscription, 'June 20, 1863,' the date of our foundation, as if 'graved with a pen of iron in the rock forever.' On the right of the rock, a farmer clothed in the traditional hunting shirt peculiar to this region, his right arm resting on the plow-handles, and his left supporting a woodman's axe, indicating that while our territory is partially cultivated it is still in process of being cleared of the original forest. At his right, a sheaf of wheat and a cornstalk. On the left of the rock a miner, indicated by a pickaxe on his shoulder, with barrels and lumps of mineral at his feet. On his left, an anvil partly seen, on which rests a sledge-hammer, typical of the mechanic arts, the whole indicating the principal pursuits and resources of the state. In front of the rock and figures, as if just laid down by the latter, and ready to be resumed at a moment's notice, two hunter's rifles, and surmounted at the place of contact by the Phrygian Cap or 'Cap of Liberty' indicating that our freedom and independence were won and will be maintained by arms."

Reverse Side.—"The reverse of the Great Seal to be encircled by a wreath composed of laurel and oak leaves, emblematic of valor and strength, with fruits and cereals, productions of our state. For device of land scape: In the distance on the left of the disc, wooded mountains; and on the right a cultivated slope with the log-frame house peculiar to this region. On the side of the mountain a representation of the viaduct

on the line of the Baltimore & Ohio Railroad in Preston County, one of the great engineering triumphs of the age, with a train of cars about to pass on it. Near the center a factory, in front of which a river with boats on the bank, and to the right of it, near the foreground, a derrick and shed appertaining to the production of salt and petroleum. In the foreground a meadow with cattle and sheep feeding and reposing, the whole indicating the leading characteristics, productions and pursuits of the State at this time. Above the mountains, the sun emerging from the clouds, indicating that former obstacles to our prosperity are disappearing. In the rays of the sun the motto 'Libertas e fidelitate ('Liberty from Loyalty') indicating that our freedom and independence are the result of faithfulness to the principles of the Declaration of Independence and the national Constitution."

Mr. Diss DeBar, the designer of the Coat-of-Arms, was an educated Frenchman who brought a Swiss colony to Santa Clara, Doddridge County, West Virginia. He was appointed by Governor Boreman to act as commissioner of immigration.

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